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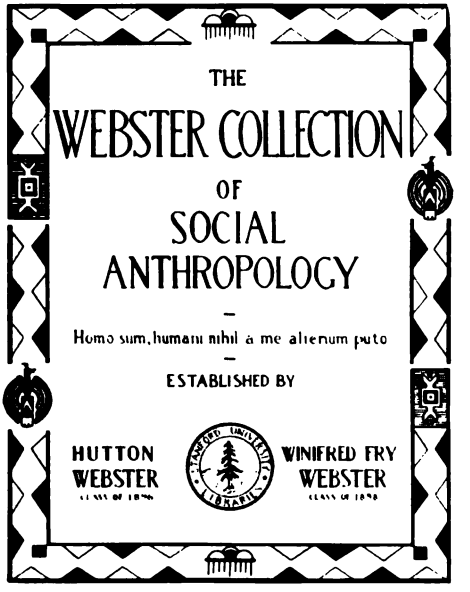
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THE EAST INDIAN ARCHIPELAG

THE MEGALITHIC CULTURE OF INDONESIA

BY

W. J. PERRY, B.A.

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TO

W. H. R. RIVERS

A TOKEN OF AFFECTION AND REGARD

PREFACE.

In 1911 the stream of ethnological research was directed by Dr. Rivers into new channels. In his Presidential Address to the Anthropological Section of the British Association at Portsmouth he expounded some of the effects of the contact of diverse cultures in Oceania in producing new, and modifying pre-existent institutions, and thereby opened up novel and hitherto unknown fields of research, and brought into prominence once again those investigations into movements of culture which had so long been neglected.

A student who wishes to study problems of culture mixture and transmission is faced with a variety of choice of themes and of regions to investigate. He can set out to examine topics of greater or less scope in circumscribed areas, or he can undertake world-wide investigations which embrace peoples of all ages and civilisations. These two modes of research are complementary: for extended inquiries give clues to difficulties encountered in limited regions; and detailed investigations in one area often suggest others of the widest scope. In this book I have confined myself to the region which has been my special object of study for some years, and in the Introduction I have stated the reasons why the subject treated is that of the Megalithic Culture.

I have tried to approach the study of the evidence without bias. But, in confining my attention to the data collected from the region I am investigating, and excluding the consideration of information derived from other regions, such as India on the west or Melanesia on the east, I have also striven to guard against the tendency of assuming, either consciously

or unconsciously, that these alien cultural influences, the origin of which I deliberately refrain from discussing here, did not play a part in the history of Indonesian Society. As a matter of fact, it became evident at an early stage in the inquiry that the obtrusive factor in the problem was the determination of the nature of such alien influences, which were mainly responsible for shaping the cultures of Indonesian peoples. I have resisted the strong temptation to search abroad for the sources of these immigrant practices, ideas, and beliefs, and have tried to analyse the evidence provided by Indonesia itself, and, from scattered fragments, to reconstruct the history of certain Indonesian customs and beliefs in places apparently free from the more obtrusive disturbing influences of the Indian, Chinese, and Arabian civilisations.

This necessarily involves the elimination of some of the most attractive aspects of the problem of the Megalithic Culture. But this gradual building-up of the history of Indonesia from the local data alone, even though tedious, has revealed a great many factors in the history of the civilisation of the world at large which might have escaped notice if some such laborious analysis as I have attempted here had not been undertaken.

I have discussed the burial customs but briefly in these pages, a fuller examination of the evidence being left to another book, upon which I am at present engaged.

Little cognition is taken also of the recent wide developments in the study of the distribution and spread of Megalithic Culture, generally. To have done so would have upset the scheme of the book, which is to provide mainly a foundation upon which future workers can build up wider arguments, and further develop the whole story of the migrations of early culture. If the book fulfils this function satisfactorily, I shall have succeeded in my aim.

Careful students of the evidence put forward will observe how many gaps exist in our knowledge of the cultures of Indonesian peoples. These lacunæ have seriously impeded the work of constructing the scheme; and it is my hope that the

realisation of the imperfection of the evidence will stimulate field workers to record the necessary facts. The knowledge of the paucity of the requisite data, and the hope that further information may soon be collected by the many able Dutch ethnographers, have decided me to limit the distribution tables to as few elements as are absolutely necessary for the elucidation of the argument. When I first began the inquiry my intention was to base the argument mainly upon the facts of distribution, and to construct for that end elaborate tables. But, as the scheme gradually took shape, it became apparent that deep-seated relationships, which could not be expressed by means of tables, exist between the various groups of facts, and in the latter part of the book more attention is paid to those matters than merely to distributions. At the same time I look forward to the day when it will be possible to construct complete distribution maps for many cultural elements of Indonesia, and thereby to make the exposition of the ethnology of that region so much the easier.

It would be ungracious on my part were I to fail to acknowledge the great debt that I owe to Dr. Rivers. Not only did he entirely remould my ideas, when I first became acquainted with him in 1910, and introduce me to the great and fertile conception of culture-mixture; but ever since he has always been ready to help me with advice and criticism. He suggested the thesis of this book and advised me regarding the method of investigation, and he has helped to clear away many obscurities in my presentation of the case. I can only hope that the results obtained constitute some slight return for all his kindness. I hope also that I may have contributed something towards the development of the thesis of culture-mixture with which his name will ever be associated.

It is owing to the advocacy of Prof. Elliot Smith that this book appears under the auspices of the Manchester University Press. He has read the book more than once in MS., and has helped to see it through the press. For this, and for many other kindnesses, my best thanks are due to him.

Any student of ethnology working far away from libraries,

and unable to buy the necessary literature, would be seriously handicapped were it not for the existence of an institution such as the London Library. Were it not that Dr. Hagberg Wright, the Secretary and Librarian, agreed to advise the Committee to buy for me, an unknown young man, several expensive Dutch works, it would have been impossible to have begun the work, the first considerable instalment of which is now presented to the reader. For this, and for many subsequent kindnesses on the part of Dr. Hagberg Wright, and his able assistant, Mr. C. J. Purnell, I cannot ever be too grateful. Nor can I omit to thank Miss Hughes, the Secretary of the Royal Asiatic Society, and her assistant, the late Mr. H. A. Good, for all the trouble that they have taken on my behalf. The possession by the Royal Asiatic Society of the two chief Dutch periodicals dealing with the ethnography of the East Indian Archipelago has been a circumstance of vital importance for me, and without the aid of that Society I should have been seriously handicapped in my work.

My thanks are also due to Dr. A. C. Haddon for his kindness in reading the proofs, and for the loan of literature; to Mr. A. M. Hocart for reading the MS., and for offering me many valuable suggestions; to Heer Kruijt for information regarding central Celebes; to Mr. J. A. Robertson and the American Bureau of Insular Affairs for the loan of photographs; and last, but not least, to my sister, Miss K. M. Perry, for the excellent line drawings and maps that appear in this book.

W. J. PERRY.

POCKLINGTON, *28th November*, 1917.

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CHAPTER I.

INTRODUCTION.

IT is the aim of this book to institute an inquiry into certain problems connected with the cultures of the less advanced peoples of Indonesia. The term Indonesia will be taken to include not merely the East Indian Archipelago, to which it is usually applied, but also Assam, Burma, the Malay Peninsula, the Philippine Islands, and Formosa, which are inseparably linked with it by racial and cultural bonds. The nature and scope of the inquiry can best be set forth by means of an account of the events which led to its inception.

In the course of an examination of the cultures of Melanesian peoples, Dr. Rivers (in 1910) came to the conclusion that the only way to account for the existence of certain customs among the people of Melanesia was to adopt the hypothesis of culture-mixture. He assumed that there had swept into that region at least one wave of migration of people possessing customs and beliefs foreign to those of the indigenous population, and that from the interaction of these two systems had resulted the cultures which he was examining. An investigation into groups of social phenomena, such as those connected with the secret societies of the Banks Islands and elsewhere, conducted in the light of the hypothesis of a cultural intrusion, led him to momentous results, some of which were announced in his Presidential Address to the Anthropological Section of the British Association at Portsmouth in 1911.

This statement had an important consequence. In the year 1908 Prof. Elliot Smith identified an alien racial element of well-defined type that had intruded into the northern end of Egypt before the Pyramid age. When he came to England in 1909 and examined the human remains in various

museums, he found that similar aliens could be recognised in many other places in the Mediterranean and Western Asiatic areas.[1] In studying the literature relating to the finding of these significant remains he discovered that, although in the Mediterranean area they were invariably associated with megalithic monuments, this association did not always obtain in Asia, especially in those places where these alien people were found in greatest number and purity. The examination of these data, and of the distribution of megalithic monuments, led him to conclude that these aliens had migrated into the Mediterranean area and had adopted, directly or indirectly, from Egyptian sources, the custom of building megalithic monuments.

These views were communicated to the Royal Anthropological Institute informally in the course of a discussion on 9th May, 1911, having already been set forth in the MSS. of the "Ancient Egyptians," which was then ready for printing. But the chance discovery of unmistakable representatives of the same Armenoid racial type in the Chatham Islands started a world-wide search for further evidence. He came to the conclusion that these Armenoid traits afforded definite evidence of a widespread movement of people, who built megalithic structures wherever they went. Dr. Rivers' Presidential Address served to crystallise Prof. Elliot Smith's ideas, for the two investigations were complementary the one of the other. In his Presidential Address to the same section of the British Association in the following year, Prof. Elliot Smith emphasised his adhesion to the views of Dr. Rivers, and opened a discussion in which he put forward the view that megalithic monuments, in whatever part of the world they may be found, showed such similarities of structure and associations that they must have been the work of people sharing a common culture. This thesis he has maintained with further evidence in succeeding years.

In 1913 another link in the chain of evidence was forged by Dr. Rivers, who showed that the megalithic monuments of Oceania were probably the work of sun-worshipping immigrants.[2] This result constituted important support for the thesis of Prof. Elliot Smith, for, in Europe and the western Mediterranean, there is also a direct association between megalith-building and the

[1] I am much indebted to Prof. Elliot Smith for this account. [2] (ii); (i).

worship of the sun. In this way the independent researches of Dr. Rivers and Prof. Elliot Smith were converging upon the problem of accounting for the presence of megalithic structures in various parts of the earth. Working on utterly different kinds of material from opposite sides of the world, these two investigators were arriving at the same general conclusions. In view of the widespread interest in megalithic monuments, and their bearing upon the early history of mankind, it became necessary to endeavour to trace the course of this migration into Melanesia.

The work which Dr. Rivers was carrying on in Melanesia, and the constant discussions which we had maintained during four years concerning the relationships of Indonesian beliefs and customs to those of Melanesia and Polynesia, had fully persuaded both of us that deep-seated cultural connections exist between Oceania and Indonesia, and further, that the presence or absence of megalithic culture in Indonesia, once firmly established, would go far towards confirming or disproving the arguments of Dr. Rivers and Prof. Elliot Smith. Indonesia occupies a position of peculiar importance in relation to the main argument as to the origin and nature of megalithic monuments, for it forms the sieve through which any extensive migration from the West to Oceania must pass. Any migration into the Pacific of sun-worshipping megalith-builders should have left traces of their passage in Indonesia. Dr. Rivers suggested that the evidence for the existence of megalithic monuments and the sun-cult in Indonesia should be collected and examined, and this task was begun by me in the autumn of 1913.

If the problem that Dr. Rivers had to solve in Oceania was complicated, the conditions under which it had to be attempted were simple compared with those obtaining in Indonesia. For the latter region is in intimate relationship with the Asiatic continent, and has been exposed to a great variety of cultural influences, from the effects of which it has shielded Melanesia. Moreover, it includes a number of islands, such as Java, which have been the seats of a variety of relatively high civilisations for many centuries. Thus the problems of Indonesia are vastly more complicated than those of Melanesia. Evidence points to the possibility of a connection between India

and Java as early as 700 B.C.,[1] a regular commerce being maintained between the two countries. Other influences, such as those of the Chinese and the Arabs, have been at work in later centuries. Moreover, the great activities displayed by the Malays of Menangkabau in Sumatra, who have spread over the East Indian Archipelago, occupying the littoral of many of the islands, in many places together with Chinese traders, have added to the complexity of ethnological problems in Indonesia. But, in spite of this, many parts of Indonesia are inhabited by peoples possessing cultures which seem to be relatively simple and untouched by the influence of the higher civilisations. Whether this apparent simplicity and purity be real is another matter, the consideration of which must be deferred: but a foreshadowing of the answer to this question will be forthcoming in this book. These peoples, however, afford a more favourable subject for examination than those of Java and elsewhere. I propose therefore for the present to leave on one side all peoples whose culture shows signs of the influence of such higher civilisations as are associated with Brahmanism, Buddhism or Islâm, and to confine my attention to those whose culture appears to be relatively simple. The portions of Indonesia which for this reason I shall omit, are Java and Madura, Bali and Lombok in the Sunda group; the Banda and Seranglao groups; Ternate and Tidore in the Moluccas; the south-west portion and the Mohammedan coastal peoples of Celebes; the coastal states of Borneo; the whole of Sumatra and the Malay Peninsula; and the more advanced parts of Assam and Burma. These regions are left blank on sketch map number one.

Since the argument will be concerned with the examination of groups of facts recorded in most parts of Indonesia, it will be necessary to adopt some fixed plan of presentation of the evidence. I propose to begin each chapter with a statement of the facts to be examined therein. To facilitate the reader's task in following the unavoidably tedious narrative describing the collecting of apparently trifling and unimportant scraps of evidence from a vastly complex area, the same itinerary will be taken in every case. It is hoped that the reader who familiarises himself with the map on the first "survey," will experience no

[1] Oldham has summarised this evidence.

difficulty later on with the oft-repeated references to geographical names. The survey will begin with Sumbawa, and then will work due east to Timorlaut by way of Flores, Solor, Adunara, Sumba, Savu, Roti, Timor, Wetar, Damar, Keisar, the Leti Moa Lakor group, Luang-Sermata, Babar, and Timorlaut. For the purposes of this book I shall call the region occupied by these islands the "Timor region".

After reaching Timorlaut the survey will swing northwards by way of the Aru and Kei Islands, Watubela, Ambon, Seran and Buru, the Seranglao Islands being left out on account of the strong influence of Mohammedanism there. The survey will then proceed by way of Halmahera to the Philippines and Formosa.

Celebes will next be treated. The two regions of this island which will be considered are Minahassa and central Celebes. The survey will next include Borneo, Nias, and the islands west of Sumatra. In Assam and Burma the peoples to be considered are the Khasi, Garo, Naga, Kuki, Lushei, Mikir, Chin and Karen.

Sketch map number one shows the route followed and the areas to be examined.

Central Celebes will play an important part in the discussions of this book. It is inhabited by coastal peoples who will not be considered, and the Toradja of the interior. Kruijt and Adriani, in their joint work on the Toradja tribes, divide them into three groups. One of these is the Sadang group, which consists of peoples living in the basin of the Sadang River. The constitution of the other two is a matter of uncertainty. Kruijt calls them the Posso-Todjo and the Parigi-Kaili groups, or the eastern and western Toradja.[1] Adriani also groups them as eastern and western Toradja. But, unfortunately, these two authorities do not include the same peoples in these groups. Kruijt places the peoples of Bada, Besoa, and Napu (see sketch map number two) among the west Toradja, and Adriani places them in the east group, but in a division different from that including the Posso-Todjo group. The difficulty of classifying the To Bada, To Besoa, and To Napu is shown by the fact that, while the To Napu belong to the west Toradja group culturally, they belong linguistically to the Posso-Todjo group.

[1] I, 3.

Sketch Map No. 2.
The Toradja of Central Celebes.

The position of the To Leboni is also a matter of doubt. Adriani includes them with the Bada-Besoa-Napu group,[1] but Kruijt puts them with the To Rato and To Rampi in the Sadang group.[2]

SKETCH MAP NO. 3.
The Burma-Assam region.

I shall therefore divide the Toradja into three groups :—

(1) Posso-Todjo.

(2) Bada-Besoa-Napu.

(3) Sadang.

In group three I have followed Adriani's sketch map. When necessary, any peoples whose affinities are doubtful will be mentioned by name.

[1] Op. cit. III, 351. [2] I, 5.

Sketch map number three shows the habitat of those peoples of the Burma-Assam region who will be treated in this book.

It is the common experience of those who take up the detailed study of a group of ethnographical facts in a given region to find that the terms and limits of the inquiry cannot be settled beforehand. Complexities occur, side-issues are raised, and ramifications are detected, so that what appears at first sight to be a definite problem really opens a vast field of research, whose boundaries recede as the investigation advances. This has happened in the present case. The preliminary survey, which was intended to collect the evidence concerning the distributions of megalithic monuments and of sun-cult in Indonesia, soon proved inadequate. Stone structures exist in certain places, which, although they cannot definitely be claimed as megalithic, approximate sufficiently in form to such structures as to make it imprudent to ignore them. Moreover, typical megalithic monuments in some places are so intimately associated with other structures of small stones, that it is necessary to inquire into the circumstances attending the use of the latter. Thus the problem became so involved that it was at length decided to collect and examine the whole of the evidence concerning stone-work in Indonesia, irrespective of the purpose to which the latter was put, stone implements alone excepted.

In like manner, circumstances made it necessary to examine all the beliefs concerning stones which have been recorded by writers on Indonesian peoples, and these were accordingly collected, even though their bearing upon the problem seemed at first remote.

The attempt to record only the facts concerning the sun-cult proved abortive; for it was difficult to discover any standard to which facts could be referred. Some peoples performed ceremonies in honour of, and made offerings to, the sun, and thus could be said to practice a sun-cult. But others merely entertained certain beliefs concerning the sun. In other cases, again, only tales about the sun had been recorded. The difficulty of deciding which facts to retain for examination, and which to reject, was avoided by including in the survey all practices, beliefs, and tales concerning the sun that it was possible to collect.

The basis of inquiry thus became greatly widened. It might be expected that in this way the original problem would be lost sight of amid the crowd of subsidiary inquiries thereby rendered necessary. But this is not the case. For, as the examination of these masses of facts proceeded, it became clear that they all had a bearing upon the original problem. The impracticability of dissecting out facts concerning megalithic monuments was seen to be due, not to lack of knowledge, but to the close relationship existing between these structures and the other stone-work of Indonesia: the problem of determining the reasons for the existence of megalithic monuments in Indonesia was part of the wider problem of accounting for stone-work in general. And the same was the case with beliefs and practices concerning the sun.

The method adopted was recommended by Dr. Rivers. A chapter is devoted to the examination of each type of stone structure, to each group of beliefs concerning stones, and to each group of beliefs and practices concerning the sun. In this way the argument is developed gradually, and a consistent scheme is elaborated. Such a scheme forms an organic whole, built up by induction on the sole basis of the examination of facts. This method of examination necessarily makes the first few chapters somewhat dull and difficult, but it is hoped that the argument will gain in interest and clarity as it proceeds.

At every stage in the presentment of the evidence customs and beliefs will be revealed in Indonesia for which more or less close parallels are found widespread throughout the world. As the aim of this book is to set forth the Indonesian evidence impartially and to extract the story it reveals, the wider issues have been deliberately suppressed for the present.

CHAPTER II.

MEGALITHIC MONUMENTS.

MEGALITHIC monuments are usually defined as structures made of large stones, usually rough and unhewn, which conform to certain well-marked types. Unfortunately, students do not always use the same names for these various types; so, before proceeding to a consideration of the presence of megalithic monuments in Indonesia, it will be necessary to define terms which are being used in widely different senses. I shall follow Mr. Peet. He includes among the typical megalithic monuments:—

The *menhir*, a tall rough pillar with the base fixed into the earth;

the *trilithon*, a pair of tall stones set at a short distance apart supporting a third stone laid across the top;

the *dolmen*, a single slab of stone supported by several others arranged in such a way as to enclose a space or chamber beneath it;

the *corridor tomb*, usually consisting of a chamber entered by a gallery or corridor. In cases where the chamber is no wider than, and hence indistinguishable from, the corridor, the tomb becomes a long rectangular gallery, and answers to the French *allée couverte* in the strict sense;

the *alignment*, a series of menhirs arranged in open line on some definite system;

the *cromlech*, consisting of a number of menhirs arranged to enclose a space, circular, elliptical, or, in rare cases, rectangular; and

the *hunenbett*, consisting of a rectangular (rarely oval or round) heap of earth covering a megalithic tomb—this is a simple elongated rectangle in shape made of upright blocks and roofed with two or more cover-slabs.

Rock-cut tombs. It is also recognised that the practice of placing the dead in tombs cut out of the living rock is definitely to be associated with the presence of megalithic structures.

It has long been a matter of common knowledge that megalithic monuments are to be found in Assam. Unfortunately, Dutch ethnographers, in their desire to record the less material elements of the cultures of their subject peoples, have often over-

looked, among other things, the stone monuments which exist in certain parts of the East Indian Archipelago. Consequently, it is not generally known that stone structures, which conform to the types enumerated, exist in certain places. These structures are not always made of large stones, nor are these stones always unworked, but they are unmistakably "megalithic monuments" in size or form. The objection that, to be called "megalithic" a structure must be made of large unworked stones, is quite just, if one submits to the strict limitations of the meaning assigned to the term by archæologists and ethnologists; but the adoption of such a rigid interpretation would close the door upon all real investigation. The principle adopted in this book is that of examining the facts without any reservations: so the only criterion that will be adopted with regard to stone monuments will be that of form. Any structures which are not of the types enumerated will be examined later.

In the Timor region the presence of megalithic monuments is as yet only definitely established in Sumba, although they are probably to be found in the neighbouring islands. And the only account of these structures which is at all detailed is that of Dr. ten Kate, who describes some which he saw in the course of a rapid journey through the island.

At Samparengo he saw dolmens of rough stones, examples of which were also seen by him at Laonatang, a village in the Kanata district. In this latter place he reports a dolmen consisting of a table-stone supported by four pillars.[1] He saw some old megalithic monuments, most of them dolmens and "hunenbetter," in the bush about Lambanapu.[2] He reproduces, in one of his articles, a drawing of a dolmen in front of the house of a chief of Lewa who lived at Lambanapu.[3]

Ten Kate saw a dolmen in front of one of the houses at Watubela. He also reports dolmens at Kopa and "hunenbetter" at Labai. On a hill near the shore close to Landuwitu-Ratimbera, and near Peremadita he saw a number of dolmens, one of which was 5 feet high. He describes some trilithons at the

[1] (i), 556. [2] It is not possible to say if Peet and ten Kate mean the same thing by "hunenbett". The latter has not given any drawing or photograph of a "hunenbett" to enable us to decide the point, which must therefore be left open. [3] (ii), Plate XX, 4.

latter place, and gives reproductions of dolmens at Wainbidi and Waijelu.[1] Roos records dolmens at Kambera.[2] Ten Kate found many dolmens on the island of Salura.

The villages of Sumba are often built in the form of a square, round which are to be found dolmens made of great stones, 10 to 12 feet high, 4 feet broad, and 18 inches thick, resting upon short piles.[3]

In Keisar, Leti Moa and Lakor, and Timorlaut, there are stone structures which may possibly be related to dolmens. Each of these consists of a large flat stone which rests upon

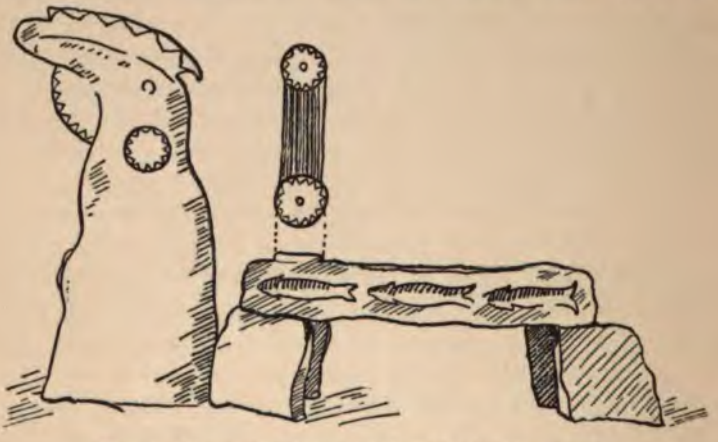

FIG. 1.—Grave at Pérémadita, Sumba (after ten Kate).

several smaller ones, the latter being of such a size that the large stone is only a few inches from the ground.[3] The description suggests that they are dolmens of a modified type, but it would not be wise to assume that they are real dolmens. They will be considered later.

In the Kei Islands cromlechs are to be found, but no information is to hand as to the size of the stones of which they are made.[4]

The offering-places, in the villages of West Seran, consist either of a large stone resting upon three or four others, or of

[1] (i), 578, 579, 582 *et seq.*; 588, 600, 605, 609, 611, 626. See Plate. [2] (i), 56 *et seq.*, de Oosterling, II, 1835, 72; Alderewereldt, 581. [3] Riedel (iv), Plates XXXVIII, XXXV, 283. [4] Rosenberg (iii), 351; Hugo Merton, 190.

a large stone half-buried in the ground, the descriptions therefore suggesting, in the first case, a dolmen, and, in the second case, a menhir.[1] Riedel also mentions a structure consisting of a large flat stone surrounded by smaller stones, the description suggesting a dolmen associated with a cromlech.[2]

Cromlechs are reported by Bastian in Halmahera.[3] No evidence is yet to hand of the presence of megalithic structures in the Philippines, or in Formosa.

In the Minahassa district of North Celebes the dead are sometimes placed in rock-cut tombs. The cousins Sarasin saw, in a hill near Kema, some of these tombs, the openings of which were closed with boards or hewn stones.[4] Menhirs are sometimes erected in pairs near the large stone urns in which, in this district, the dead are generally placed.[5] In each Minahassa village there is a stone structure, which consists of two, three, or sometimes still more stones. In the latter case a number of smaller stones surround one or more large stones, the description suggesting a cromlech associated with menhirs.[6] Menhirs are reported among the Posso-Todjo Toradja of Central Celebes.[7] At Bulili among the To Bada is a cromlech, and on the same hill are many large blocks of stone which may at some time have formed part of a stone structure.[8] Among the To Lage a menhir is reported at Wawo Lage,[9] and not far from the village of Pakambia some menhirs are to be found.[10]

On the Paloppo river the Sarasin cousins saw the mausoleum of a chief, which was pyramidal in form. On the top of it was a porcelain pot.[11] Many rock-cut tombs similar to those found in Minahassa are to be seen in the Simbuang-Mapak valley.[12] They are called *Liang*, and are hewn out of the steep face of the rocky eminence on which is placed the village to which they belong. In the Rantepao valley alignments are to be found on some of the small hills.[13]

The Dusun of British North Borneo erect cromlechs.[14] They

[1] Riedel (iv), 106; Sachse, 71; Ludeking, 58. [2] (iv), 106, 107. [3] 17. [4] II, 10, 11. [5] Buddingh, II, 52. [6] Schwarz, 186. [7] Kruijt (iii), 208-9. [8] Ibid., (vi), 359; Grubauer, 517; Schuut, 16 *et seq.* [9] Kruijt and Adriani, I, 38-9. "The To Lage are the aristocrats among the otherwise democratic Toradja." [10] Ibid., I, 60. [11] II, 148. [12] Grubauer, 200, 201, 203, 204, 206, 214, 218. [13] Ibid., 257, 278. [14] Ling Roth, I, 150.

are the only people of Borneo, who, so far as it has been possible to discover, erect stone structures of the megalithic type.

In South Nias menhirs are erected,[1] and in East Nias each village has one such menhir.[2] De Zwaan gives a photograph in his book of a menhir on the bank of the river Masio.[3] A cromlech is reported by Modigliani on the island of Nacco to the west of Nias.[4]

The Khasi of 'Assam have an elaborate system of megalithic structures, chiefly alignments and menhirs, dolmens being comparatively rare.[5]

The Garo erect menhirs, which they call *asong* and *kosi*, according as they are placed near the village or in the forest.[6] The Naga have several megalithic structures: there are two 'Stonehenges," one at Maram, which consists of an avenue of two alignments; and another at Uilong, which consists of two contiguous cromlechs, one oval and the other circular, with an alignment running from the edge of the former.[7] Mr. Hodson reproduces a photograph of a menhir at Maikel which is surrounded by a cromlech; another of a huge menhir at Maram; and a third of a dolmen near the latter place.[8] Each Marring Naga village has a cromlech. The Tangkhul Naga are closely associated with a menhir, and the Kabui Naga erect menhirs.[9]

Several of the clans of the Old Kuki of Manipur erect megalithic monuments: the Amol erect menhirs; the Hrangchal have a large menhir at Vanlaiphai; a number of dolmens made of three rough slabs placed on edge, with a fourth for a roof, which are still to be seen on the Biate hill, are the work of the Biate; a menhir is erected on certain occasions by the Thado; and dolmen-shaped structures are reported among the Chawte.[10]

Menhirs are erected by the Kohlen clan of the Lushei. Facing page 65 of his book Colonel Shakespear reproduces a photograph of the posts which the Lushei erect to commemorate the slaying of a buffalo on the occasion of a feast. In a corner of this photograph is a dolmen, formed, apparently, of four stones placed on edge with a slab covering them.[11]

Of the Chin tribes, the Sokte erect menhirs, and the Welaung,

[1] Rappard, 541; Modigliani, 308. [2] Kruijt (iii), 209. [3] I, 69-70. [4] 344. [5] Gurdon, 110, 112, 136. [6] Playfair, 82, 96-7. [7] Hodson, 186 *et seq.* [8] Ibid., 12, 102, 126, 132. [9] Ibid., 112, 198; Shakespear (iii). [10] Ibid. (i), 165, 171, 185, 205. [11] Ibid. (i), 159.

Chinbok, and Yindu erect dolmens, of which numbers, some made of enormous stones, are to be seen in the Chinbok and Yindu country.[1]

The Mikir erect menhirs, alignments, and dolmens.[2]

FIG. 2.—Dolmens at Wainbidi, Sumba (after ten Kate).

This survey demonstrates the widespread existence in Indonesia of unmistakable megalithic monuments. The accounts of these structures which are given by ethnographers and travellers

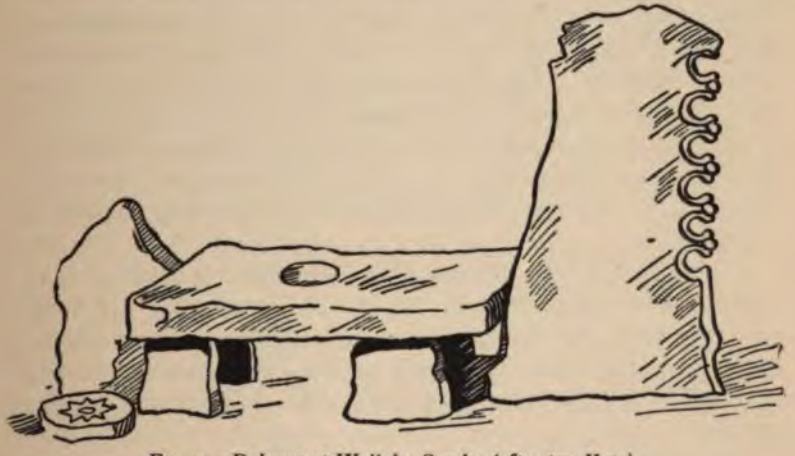

FIG. 3.—Dolmen at Waijelu, Sumba (after ten Kate).

are so meagre that no comparative study of their form and structure can be attempted. Without doubt the future consideration of these matters will enable students to draw therefrom important conclusions. At present, however, I shall call attention only to one or two points.

[1] Carey and Tuck, 193; Scott, I, 467. [2] Stack, 33; Gurdon, 148.

Dissoliths.—The Khasi erect many alignments, the menhirs in which vary in number from three to eleven, and their height ranges from 2 to 3 feet up to 12 to 14 feet: one at Nartiang in the Jaintia hills is 27 feet high and 2½ feet thick. A structure resembling a dolmen, which consists of a flat table-stone resting upon smaller stones, the top of the table-stone being generally 2 to 2½ feet from the ground, the stone itself sometimes being 1 foot thick, is generally placed in front of the tallest menhir, which is in the centre of the alignment. These people also place flat table-stones, accompanied by a menhir, by the side of the road, and in the market-places. The groups of this kind which are at Nartiang are called *ki-maw-jong-siem*, and no separate designation is given to each stone.[1]

It will be convenient to give these groups a name: I therefore propose to call them "dissoliths".[2] These structures are made by other people than the Khasi.

In his book Mr. Hodson reproduces a photograph of some Kabui girls, one of whom is standing upon a table-stone. By the side of the table-stone is a menhir, and the two apparently form a dissolith.[3] The Vuite memorial, of which Colonel Shakespear gives a photograph, has the appearance of a dissolith.[4] The dolmen shape of the table-stone portion is definite, but it is not possible to be so certain as to the relationship of the menhir standing by. They may form either an independent pair, or a dissolith.

The Thado clan of the Old Kuki erect a memorial to a woman who has performed the *Buh Ai* ceremony.[5] It consists of a dissolith, surrounded by a rectangular enclosure of about 4 square yards, which is formed by lines of stones set on edge; the interior of the space so formed is filled with small stones set on edge.

The Mikir erect alignments with table-stones in front of the menhirs.[6]

In each village of Minahassa is a sacred stone structure called *tumatowa*, which, as we have seen, may consist of one, two, or

[1] Gurdon, 143 *et seq.* [2] I am indebted to my friend Mr. J. W. Kernick for this term. [3] (i), 32. [4] (i). [5] A feast given by a wealthy person who has had an exceptionally good harvest. Shakespear (i), 90. [6] Gurdon, 148.

more stones. Generally, however, the *tumatowa* is a dissolith.[1] The presence of a *tumatowa* in each village is essential, and the first care of those who wish to establish a new village is to obtain a *tumatowa* and to find a spot on which to place it.

Large dissoliths are placed outside the houses of chiefs and notables in Nias. In north Nias dissoliths are erected outside the village in a place called the *dela*, of which the missionary Thomas gives the following description: "Under shady trees (at Siraheo) were placed, in a semicircle, two rows of stones about 8 inches above the ground, and in front of each lay one of about ½ an inch with a broken dish upon it. A single stone at one end was somewhat larger than the rest, as was also that which lay at its foot."[2]

Dissoliths thus play a noteworthy part in the lives of the peoples of at least three widely separated parts of Indonesia: Assam and Upper Burma, Minahassa, and Nias. In Assam they are used in conjunction with the alignments, in the market-place and elsewhere; in Minahassa they are found in most of the villages; and in Nias the chiefs erect them in front of their houses, and, presumably, the commoners place them in the *dela*. The presence of dissoliths in Assam, Minahassa, and Nias, three places where undoubted megalithic monuments exist, and their intimate association in the first-named place with alignments, suggest that they are to be included among the megalithic monuments of Indonesia. It will be one of the tasks of this book to account for the presence and functions of these structures.

Structures of Worked Stone.—The megalithic monuments of Indonesia are sometimes worked with tools. The alignments of the Khasi are generally formed of menhirs of hewn granite or sandstone. These menhirs are made to taper off at the top, and the tallest menhir of the alignment, which is in the middle, is sometimes surmounted by a small annular stone, which fits on to the larger stone. Examples of such carved stones are to be seen at Nongkrem, where the central stone of an alignment is carved evidently to represent the head of a man; and at Umstow, two miles from Cherra-punji, where the central menhir

[1] Schwarz, 186, 201-2; tales, 60, 71, 73, 77, 78. [2] Rappard, 536, 571; Modigliani, 295 307; Chatelin, 150.

of an alignment of five menhirs is surrounded by a curved stone covering, shaped like a hat with an indented rim.[1]

The large dolmens in Sumba are often made of smooth and well-worked stones. Ten Kate's drawings of some of these structures are reproduced in this book so as to convey some idea of the bizarre and fantastic nature of their ornament. Figure 9 is a reproduction of a dolmen consisting of a truncated pyramid resting, so far as can be seen, upon four rectangular pillars. Figure 1 shows a dolmen and a menhir at Pérémadita. The

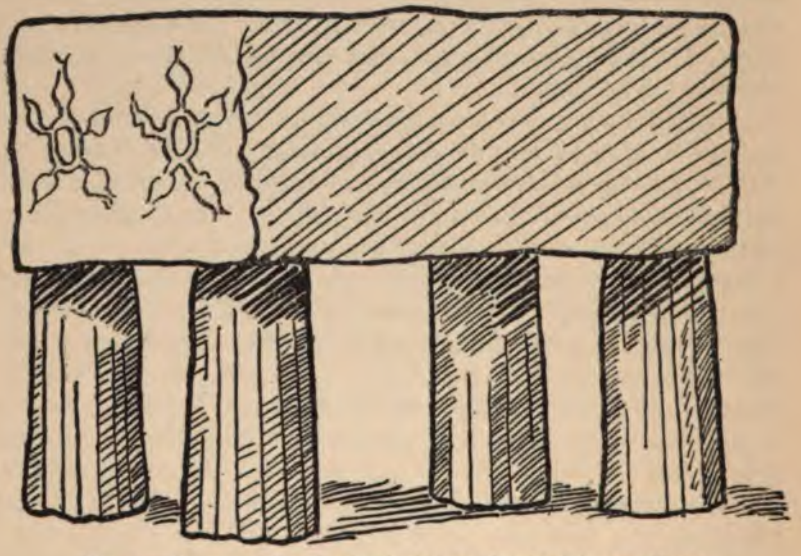

FIG. 4.—Dolmen at Landuwitu-Ratimbera, Sumba (after ten Kate).

dolmen consists of a flat stone (upon which representations of fishes are carved) resting upon four rough corner-stones. At one end stands a menhir with a carved headdress which resembles that of a Hawaiian war-god: on it are carvings that appear to represent the sun. Another menhir, also with apparent representations of the sun carved on it, appears to be standing by the side of the dolmen. Figure 3 is taken from ten Kate's sketch of a monument near Waijelu. It consists of a rough table-stone with a circular hole cut in it (but whether this be a cup-marking

[1] Gurdon, 143-5.

or a perforation it is not possible to tell), which rests upon four rough stones. On the ground is a circular piece of stone carved with an apparent representation of the sun. At one end is a small pyramidal menhir; and at the other end is a large menhir worked in a manner termed "à jour" by ten Kate. This form of ornamentation is to be seen in Figure 3. Figure 2 is a representation of typical dolmens of rough stones. Figure 8 is a reproduction of a structure, which, although not definitely megalithic in type, is undoubtedly the work of the people who made the megalithic monuments of Sumba. A truncated rectangular pyramid rests upon a rectangular stonework platform made of stones laid in courses, and a large flat stone is laid on the top of the pyramid. Some drawings are to be seen on the structure.

Ten Kate describes, but does not give drawings of, other stone structures. At the head and foot of a dolmen at Kopa, which had two cup-shaped depressions in the table-stone, were single menhirs (on which representations of fishes, crabs, crocodiles, and horses were carved), each in the form of a man. They stood back to back, and ten Kate says that the faces resembled slightly those of the images on Easter Island. Ten Kate also found human figures carved upon the menhirs standing by the side of a dolmen at Lawiri-Ladesa.

The megalithic monuments of Sumba are therefore diverse in form, and their ornamentation is remarkable. They fall into two groups: ordinary dolmens of rough stones, which seem to be those of the commoners; and other dolmen-like structures of varied form which are said by ten Kate, in some cases, to be connected with the chiefs. This distinction between chiefs and commoners will occupy our attention continually in later chapters.

CHAPTER III.

STONE GRAVES.

IT will be necessary to return in a later chapter to the consideration of the functions and associations of megalithic monuments, but it is essential first to examine those divisions of the stone-work of Indonesia, which, although not megalithic in form, are similar in function. The next three chapters will therefore be devoted to this investigation, and then a comparison will be made between the two groups of stone-work, megalithic monuments and non-megalithic structures.

In this chapter I shall examine all forms of graves in the construction of which stone is used. These will be called "stone graves". The survey will even include cases where, after an interment, a few pebbles are laid on the surface of the grave. This course is adopted because it would be begging the question to assume beforehand the meaning of the presence of stone-work, to however small an extent, on graves. It is better to cast the net too wide, and to reject later, than to miss out what further investigation may prove to be of importance.

The Do Donggo of the Bima hill country of Sumbawa inter their dead in a round hole, upon which they place a stone.[1] In Flores, in the Endeh region, the dead are interred, and a heap of stones is placed upon the grave:[2] the people of Manggarai bury their dead in a round hole upon which they place a stone.[3] In the island of Solor a rectangular heap of stones is placed upon the grave; in the island of Adunara a stone structure is placed upon the grave,[4] of which ten Kate gives a representation.[5] He mentions white-plastered graves in Savu.[6] A rectangular structure of stones is placed on the graves of commoners in Roti,

[1] Zollinger (i), 129, (ii) 691-2; Freijss, 510. [2] Ten Kate (i), 206. [3] Hoedt, 510. [4] Ten Kate (i), 239, 241, 245. [5] (ii), Pl. IV. [6] (i), 695.

but chiefs are placed in white-plastered tombs.[1] On the graves in south-west Timor either a heap of stones or a single stone is placed, the latter being sometimes 6 feet in length. In the Bakanasi district of Timor, the body of a chief is placed in a stone house, and the door is closed up.[2] The grave structures in Belu are of stone, and are elliptical or rectangular in shape: those on the graves of chiefs may reach the height of 3 to 6 feet, but those on the graves of commoners are generally only a few inches in height. A vertical stone generally stands at the head of the grave, which is also sometimes surrounded by a stone wall.[3]

In Wetar the dead are interred, and each person who has taken part in the funeral ceremony places a stone on the grave, where they lie in rows. Stones about 3 feet high are placed on the graves of chiefs and notables.[4] Jacobsen states that the graves of chiefs and notables have heaps of stones on them.[5] In Keisar the dead are interred at the side of the house, the grave being afterwards filled up with stones to the height of 18 inches. Later on the graves of notables are built up.[6] The people of Leti Moa and Lakor inter their dead, and a mound of earth, surrounded by a ring of stones, is made on the grave.[7] The dead are sometimes interred in the Babar Islands, the grave being covered with stones.[8] The graves in Kei Islands are generally surrounded by a wall of rocks: one grave on Nuhuroa consists of a small house 8 feet by 4, made for the most part of stone:[9] Langen describes an old grave on the shore made out of coral rock.[10] The dead are sometimes interred in Watubela. In such cases a stone is placed at the head and foot of the grave.[11] In Ambon the dead are interred, and the graves are covered with a structure of large stones.[12]

Bastian gives the following account of a mode of disposal in Seran. He says that the bodies of chiefs and priests among the "Alfurus" of that island are exposed on platforms. The head is taken from the half-decayed body and interred in the village in a stone coffin called *Jole-ului*.[13] This is not mentioned by any

[1] Ten Kate (i), 664, 688; Heymering, 354 *et seq.* [2] J.D.K., 27; Ten Kate (i), 343; Reinwardt, 342; S. Muller, II, 261. [3] Gryzen, 71. [4] Riedel (iv), 453. [5] 114. [6] Riedel (iv), 420-1. [7] Ibid., 394. [8] Ibid., 359. [9] Pleyte, 825; Jacobsen, 196. [10] 58. [11] Riedel (iv), 211. [12] van Schmid, 593. [13] I, 142.

other writers, but, in view of the fact that platform-disposal occurs in the north-west part of the island, it is probably correct.

The dead are interred round Lake Wakollo in Buru, and a stone is placed at the head and foot of the grave.[1]

In the Philippines stone graves are found. The Mandaya of Mindanao inter their dead, or else place them on the ground with a heap of stones over them.[2] The Tinguinanen inter their dead, and place a large stone on the grave.[3] The Benguet-Lepanto Igorot put their dead in coffins, which are placed either in caves or under a large stone.[4] Among the Bontoc, unmarried people are interred, near the house, in a grave which is lined with stone. After the interment, the body is covered with rocks, and the grave is then filled up with earth.[5] The Bontoc are head-hunters, and a man whose head has been taken is placed in an excavation made in the side of a mountain, and the mouth of this hole is then filled up with stones.

A similar custom is found among the Ifugao of Luzon. A man whose head has been taken is placed in an excavation in the side of a mountain. The roof of the cave is supported by pillars of stone or of earth, and the mouth is filled up with stones.[6]

The Paiwan of Formosa either inter their dead under the house in a grave which they fill up with stones, or else they make the grave in a thick wood, the grave in this case being lined with stone. The south Ami also inter their dead, and place a stone on the grave. The Tsou inter their dead near to the entrance of the house in a grave 5 to 6 feet deep. Over the body, and at some little distance from it, a large stone is placed, and earth is put on this stone to fill up the grave.[7]

The dead in Minahassa are generally placed in stone urns, which formerly were kept near the houses. These urns vary in size and shape, some being tall, and the others squat: the bottom part is hollowed out from a block of sandstone; while the top part, which serves as a lid, is shaped like the roof of a house.[8]

Graves with a stone superstructure, which are to be seen in

[1] Martin, 326. [2] Cole, 193. [3] Blumentritt, 163. [4] Sawyer, 259. [5] Jenks, 74 *et seq.* [6] Beyer (ii), 237. [7] Davidson, 575, 579. [8] Sarasin, II, 11; Graafland, I, 481; Mangindaan, 364; Riedel (i), 259.

the district of central Celebes now inhabited by the To Pebato, are said to be those of To Pajapi chiefs.[1]

At Salubalombo, the cousins Sarasin saw a house built on a substructure of stones.[2] Inside were two graves each with a stone at the head and foot. Outside were a number of graves, each with a stone on it. The custom of placing the dead in clefts of the rocks is found among the people of the Simbuang-Mapak valley.[3]

The Kayan of Borneo place a cairn of stones on the grave of a man who has been "murdered".[4]

The Khasi cremate their dead. The ashes are placed in the family mausoleum, and are afterwards taken to the clan repository. Both of these structures are of stone.[5] They also make circular stone cineraria. The Tangkhul Naga inter their dead outside the house in a circular grave, which is filled up with stones. After the interment a stone wall is built around and over the body.[6] The Kabui Naga inter their dead, and place a stone at the head and foot of the grave. Sometimes they place their dead in an excavation in the side of a hill, and close up the opening with stones.[7] The Angami Naga inter their dead in a coffin which has a stone lid. A stone tomb is made on the grave, which, in the case of warriors, is 3 feet high, and has stone or wooden pillars.[8] The Lushei sometimes place their dead on a platform by the side of the road outside the village. The platform is made of wood for a commoner, but in the case of a chief it is of stone.[9] The Haka, Shunkla, and other southern Chin tribes inter their dead in graves lined with stone.[10] The Mikir cremate their dead and place the ashes in a grave, upon which they place a stone.[11] The Karen-ni of southern Burma inter their dead.[12] The grave is 6 to 7 feet deep in the case of a commoner, and 20 feet for a chief. The grave is filled up with stones.

Though the facts put forward in this chapter are not so complete as could be wished, it is possible to derive from them

[1] Kruijt and Adriani, I, 43; the To Pajapi belong to the Posso-Todjo group. [2] II, 136-7. [3] Grubauer, 200 *et seq.* [4] Ling Roth, I, 358. [5] Gurdon, 140. [6] Pettigrew, 37 *et seq.* [7] Hodson, 14; Brown, 106; McCulloch, 52. [8] A.C.R., 1891, 240; Prain, 492; Hunter, II, 185. [9] Shakespear (i), 85. [10] Scott, 469; Carey and Tuck, 179, 192. [11] A.C.R., 1891; Stack. [12] Macmahon, 417.

information which will help considerably towards the solution of the general problem of this book, that of accounting for the presence of stone-work in Indonesia, and of megalithic monuments in particular. The main outlines of the argument of the first part of this book will be adumbrated in this chapter, and the discussions of succeeding chapters will, in addition to revealing new facts, contribute new results to confirm the conclusions which are suggested by the study of the distribution, structure, and function of stone graves.

The distribution of stone graves may be seen by consulting the tables at the end of the book. They occur through the Timor region as far as the Babar Islands. They are not found in Timorlaut or the Aru Islands. They only occur in a sporadic manner, if at all, in Seran, and they are not found in the northern part of Buru. Another gap in the distribution occurs in central Celebes, in the region of the Posso-Todjo Toradja. Borneo is devoid of stone graves, except for the cairns of the Kayan, which are only made for a certain category of people, and not for everybody. Numerous gaps therefore occur in the distribution; in Timorlaut, Aru, Seran, Buru, central Celebes, and Borneo.

Stone graves vary in structure from stone houses to a few pebbles on the surface of a grave. In the Timor region a certain uniformity is observable in the shape, if not in the size, of tombs. The general custom is to inter the dead and then to pile up a heap of stones, either in courses or irregularly, on the surface of the grave. This form of stone grave does not appear to be made in other parts of Indonesia, nor is there any other general type occurring over those parts of Indonesia outside the Timor region. But attention must be called to similarities between certain graves of the Philippine and Formosan peoples, on the one hand, and the Naga tribes of Assam on the other. The Bontoc of Luzon and the Formosan peoples sometimes dig graves which they line with stone: this custom exists also among the Tangkhul Naga. Also the Bontoc and Ifugao of Luzon, on the one hand, and the Kabui Naga, on the other hand, make a singular form of grave by excavating a hole in the side of a mountain, and then, when the body has been placed therein, filling up the entrance with stones.

Other examples of similar forms of tombs made by widely

separated peoples are the stone houses of Roti, south-west Timor, the Kei Islands, and the Sadang district of central Celebes ; the stone urns of Minahassa and Seran ; and the rock-clefts of Luzon and the Sadang district of central Celebes. But for the purposes of this book, the cases to be noted are those of the graves of the Timor region, and the excavations in the sides of mountains made by the Bontoc, Ifugao, and Kabui Naga, the significance of which will shortly be seen.

It is now necessary to turn to the study of the functions of stone graves, whereby a distinction of fundamental importance will be revealed. For, in the Timor region, the tombs which are made for chiefs and notables differ, either in form or in size, from those made for commoners. This distinction is shown in the table.

Chiefs.	*Commoners.*
Adunara: Solid built-up structure.	Heap.
Roti: House.	Heap.
S.W. Timor: House. Stone on grave.	Stone on grave.
Belu: Solid built-up structure (3-6 feet).	Solid built-up structure (few inches).
Wetar: Heap. Large stones.	Small stones.
Keisar: Filled with stones and built up.	Filled with stones, but not built up.

In Roti and south-west Timor, the bodies of chiefs are put in a stone house. This is nowhere reported in the case of commoners. When chiefs and commoners are interred, the size of the grave structure diminishes, both in the case of chiefs and of commoners, from west to east, until it disappears in places where stone graves are not reported. But in all cases the tombs of chiefs are larger than those of commoners. The chiefly class therefore appears to be more closely connected with stone graves than the commoners.

The evidence derived from other parts of Indonesia supports this conclusion. The most striking is that afforded by the Toradja of central Celebes. With the exception of the To Pajapi and perhaps the To Lage, the Posso-Todjo group lack hereditary chiefs. And the only stone graves which are reported in the lands of this group of the Toradja are those ascribed to

the chiefs of the To Pajapi.[1] Hereditary chiefs and stone graves are therefore closely connected among the Posso-Todjo Toradja.

In other cases a direct association exists between chiefs and stone graves. In the Sadang district of central Celebes the stone house at Salubalombo, seen by the Sarasin cousins, contained the grave of a chief; and the platforms made by the Lushei are of stone in the case of chiefs. To these may be added the doubtful case of the use of stone urns for chiefs in Seran.

The study of the associations of stone graves has therefore revealed the existence in several places of a chiefly class the members of which have more elaborate tombs than the commoners.

But such a distinction is not reported everywhere. In some of these cases a special form of grave is associated with warriors whose heads have been taken. This is so among the Bontoc and Ifugao of Luzon, who place them in graves excavated in the side of a mountain; among the Kayan, who place cairns of stone over them;[2] and among the Angami Naga who construct a specially elaborate tomb on the graves of their warriors.

It is remarkable that the special form of grave consisting of an excavation in the side of a mountain, which the Bontoc and Ifugao make, should be associated with warriors. The fact would be still more striking if the Kabui Naga also reserved their graves in the sides of mountains for the same class, but unfortunately no one has made a note of this point. But the Kabui Naga are allied to the Angami, who, as we have just seen, make a special form of grave for their warriors. So this distinction may also hold among the Kabui Naga.

[1] Kruijt and Adriani, I, 38. [2] I think that, in the case of the Kayan, men who have been "murdered" can be included in the class of warriors whose heads have been taken.

CHAPTER IV.

STONE OFFERING-PLACES.

THE peoples of Indonesia place offerings upon graves or on sacred stones, or on altars specially made, either of stone or wood for the purpose. It is the aim of this chapter to collect and examine the accounts of stone structures made for the purpose of receiving offerings.

In front of every house of the Do Donggo in the Bima district of Sumbawa is a smooth table-stone.[1] Ten Kate describes several offering-places in the villages of the Sicca district of Flores: in the houses flat offering-stones are placed near the hearth, and in the villages themselves are offering-places consisting of pointed posts surrounded by heaps of stones regularly piled up round them. Ten Kate saw, in a village of Lio in this district, a wooden post with a hollow in the top, in which was a stone. Opposite a chief's house in Sicca he also saw a stone pillar roughly carved into a cylindrical shape, in the top of which were nine cup-markings.[2] In the open space opposite the house of the chief in every village of Manggarai (in Flores) is a large stone structure made of colossal stones, flat on top, with room for several people.[3]

Offering-places of stone occur in the villages of Solor and Adunara.[4] In Solor, at Namang, Tukang, and Lamakera are structures which consist of four flat stones placed on edge so as to form a square surrounding a wooden pole.[5] In front of one of the houses at Watubela in Sumba, ten Kate saw a table-stone with a wooden pole near it. Offering-stones are also found in this island.[6]

[1] Zollinger (i), 129; Freijss, 510. [2] Ten Kate (i), 209, 215, 222, 224. [3] Meerburg, 449-50, 464. [4] Ten Kate (i), 239, 241, 245. [5] Ibid. (ii), 14. [6] (i), 578.

Stones are used for offering-places in Savu. Some seen by ten Kate were one metre or so in length, and shaped like upturned pots with a flattening at one end.[1] Donselaar mentions large stones in this island: fifteen at Seba, seven at Musara, and four at Timo, some of them round or oval in shape, 6 to 8 feet in diameter, 3 or 4 feet high, and more or less flat on top.[2] Captain Cook says that each chief in Savu places a stone in the principal village of his district: some of these stones are so large that it is difficult to imagine how they could have been brought to their present position, especially when they are placed on the tops of high hills.[3] Each god also has a holy stone upon which dogs are sacrificed during feasts.[4] The Savu people who are resident in Timor worship at a holy stone in a stone building in the middle of the town of Kupang.[5] Ten Kate describes an offering-place, situated on a corner of the wall near the house of a chief at Kota Nitu in the Dela district of Roti, which consists of a wooden pole standing upon a circular structure of stones.[6] In this island offerings are made to the dead on heaps of stone called *hufaliana lipelaliha*.[7]

Ten Kate reports that at the corners of the chief's house at Atuli Helong, in south-west Timor, there are some great stones, more or less oval in shape.[8]

The people of Belu use stone offering-places, made of piled-up stones, with a flat stone on top.[9] An offering-place seen by ten Kate at Lahurua in Fialarang, in a thicket near Mt. Lekaan, consisted of a circular built-up stone structure provided with a roof. The horizontal stone was, he says, suggestive of a human figure.[10] He describes another offering-place, consisting of a wooden pole standing on a circular heap of stones near the entrance to the village of Kewar, Lamakera, in central Timor, and close to some platforms made of immense stones. The pole was carved roughly in the form of a human figure, and a flat stone was laid on its head.[11] The village of the chief of Sauo in central Timor has a village-house where is kept the *vatu luli*, or holy stone, on which offerings are made.[12] A flat stone, which is to be seen on the top of Mt. Fatunarak in Saluki, is the most

[1] (i), 695. [2] 310. [3] S. Muller, II, 282-3. [4] Bastian, II, 67. [5] S. Muller, II, 282. [6] (ii), 15; (iv), 44. [7] Bastian, II, 66. [8] (i), 356. [9] Gryzen, 75-6. [10] (i), 363, 364, 368, 377. [11] (ii), 12, and (iv), 36. [12] Forbes, 444.

sacred altar in the kingdom.[1] In east Timor the people make stone heaps,[2] and also have stone offering-places in their houses.[3]

Riedel gives a reproduction of what is apparently an offering-place on an old grave in Keisar. It consists of a flat table-stone resting upon several small stones.[4] Similar structures are found in Leti Moa and Lakor, and in Timorlaut.[5] Offering-stones are also found in Dama.[6] Two forms of stone offering-places are found in the Leti Moa Lakor group: the first consists of a wooden post, surrounded by a heap of stones; the second consists of a heap of flat stones, generally basalt or trachite.[7]

The stone offering-places in the Luang-Sermata Islands consist of a rectangular heaped-up stone structure, with a large flat stone, called *watuleari*, at each corner. Another stone where offerings may be made is the *watuornoho*, a large block 6 feet in length, which is placed near the village drinking-place.[8] A wooden pole surrounded by a rectangular heap of stones exists in each village in the Babar Islands.[9] Certain stones are used as offering-places on some of the uninhabited islands of Timorlaut,[10] but in each village, under the holy tree, is an offering-place consisting of a heap of stones.[11] These heaps are also to be found in the Kei Islands. Hugo Merton gives a photograph of an offering-place in the village of Ohoinangan in the Kei Islands which consists of a rectangular structure of flat stones. He reports another on the island of Waor.[12]

A stone, upon which offerings can be made, is to be found in the middle of each village in Watubela.[13] Four varieties of stone offering-place are known in Ambon: the *haubawa* is not described; the *hau kamar warsela* is the stone on which the dammar torch must be burnt; the *hatu resi* has already been described in chapter ii.; while the *ureu* is a rough masonry structure with some dark stones on top.[14] Martin gives a reproduction of an offering-place in Hatalai, consisting of a granite block of natural formation shaped like a huge bowl. Offering-stones are found near the village-houses in the south part of

[1] Forbes, 467. [2] Ibid., 436. [3] Ibid., 468. [4] (iv), Plate XXXVIII. [5] Ibid., Plate XXXV; (iv), 281, 283, 276. [6] Ibid., 463. [7] Ibid., 379; v. Hoevell 205; Jacobsen, 140; Kolff, 68. [8] Riedel (iv), 314. [9] v. Hoevell 205. [10] Riedel (iv), 280-1. [11] v. Doren (ii), 82. [12] v. Hoevell, 152; Merton, 189. [13] Riedel (iv), 196. [14] Ibid., 56-7.

Buru: they are not recorded in the north part. Blocks of stone are scattered about in the grass on the banks of the river Waemala in this island. One of them, a piece about 4 feet long, is considered to be the property of the people of Lisela, and not of those of Masarete, in which district it is situated. Near by is an altar made of a flat rectangular piece of limestone 6 feet long, 3 feet broad, and 3 feet high. At each corner a stone sticks out like a horn; and around the whole, on the ground, flat stones are laid in a ring. On top of the large stone is a flat hearth.[1]

The Igorot of Luzon have an offering-stone under the sacred tree outside each village.[2]

In Assam, the Quoireng Naga and the Tangkhul Naga make conical heaps of stones to which they exhibit the heads taken on raids.[3] The priests of Mao and Maikel each keep a holy stone: that at Maikel is a mass of conglomerate, which is always kept hidden in the house of the priest.[4] The chiefs of the Tashon branch of the Chin use a large rock as an altar.[5]

The study of the distribution, structure, and associations of stone offering-places yields results in harmony with those obtained in the last chapter. The tables at the end of the book show that stone offering-places are not found in the north part of Buru, among the Posso-Todjo Toradja, and in Borneo, three places where the general use of stone graves is not reported.[6] An examination of the accounts shows that, in the islands of the Timor region stone offering-places consist generally of a wooden post surrounded by a circular or rectangular heap of stones, a form of structure not reported elsewhere in Indonesia. This agrees with the results obtained in the survey of the stone graves, which disclosed the existence in the Timor region of the uniform distribution of a certain form of tomb which was peculiar to that region. The remaining stone offering-places of Indonesia do not present any structural features which need be noted here.

In some places a relationship exists between chiefs and offering-places: in Sicca a special offering-place is mentioned, which is in front of the house of a chief: the chiefs of Savu and

[1] Martin, 287, 347. [2] Sawyer, 259. [3] Hodson, 188. [4] Ibid., 189. [5] Carey and Tuck, 198. [6] Places such as Nias, where megalithic monuments are present, are not considered.

Sauo in central Timor have an offering-place in their principal villages. Ten Kate saw at Kota Nitu in Roti, and at Atuli Helong in Timor, an offering-place near the house of a chief. Formerly in Ambon only the village chiefs could use certain of the offering-places: and the Tashon chiefs have special offering-places. Thus the study of stone offering-places has brought to light fresh examples of the association between chiefs and the use of stone.

In Bima, Sicca, and east Timor offering-places are found in or near the houses of commoners. But in the majority of cases offering-places occur singly in a village. This is shown in the table:—

	Offering-place in or near commoner's house.	Offering-place in or near chief's house, or connected with chief.	Offering-place outside or inside village.
Sicca	+	+	+
Manggarai			+
Bima	+		
Solor			+
Adunara			+
Sumba		?	+
Savu		+	+
Roti		+	+
S.W. Timor		+	
Belu			+
E. Timor	+	+	+
Keisar			+
Leti Moa Lakor			+
Dama			+
Luang-Sermata			+
Babar			+
Timorlaut			+
Kei			+
Watubela			+
Ambon		+	+
Buru			+
Igorot			+
Quoireng Naga			+
Tangkhul „			+
Mao „			+
Maikel „			+
Chiru „			+
Tashon		+	

The study of stone offering-places introduces another complication into the problem of accounting for the existence of stone-work in Indonesia. It is not only necessary to account for the fact that the association between chiefs and stone is more direct than that between commoners and stone: we now have to account for the existence of single offering-places in each village of so many islands.

CHAPTER V.

STONE SEATS.

CIVILISED peoples are so accustomed to sitting upon seats that the use of such things by Indonesian peoples does not at first seem strange. Yet the act of sitting upon a special structure of any kind is foreign to many peoples of low civilisation. So far as I can judge, from the examination of a large number of photographs, Indonesian peoples habitually sit on mats, or squat on the ground.

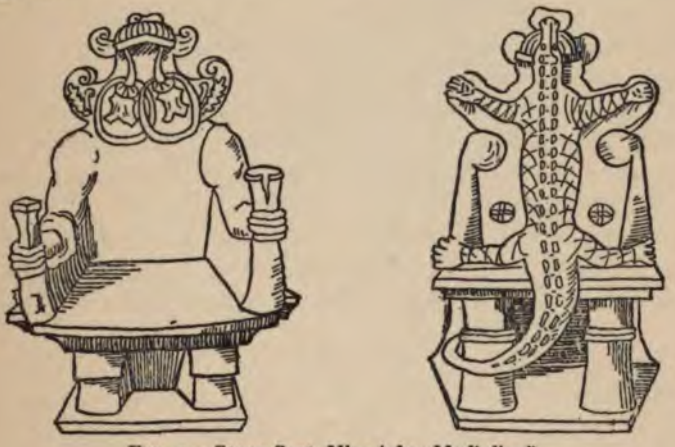

FIG. 5.—Stone Seat, Nias (after Modigliani).

One prerogative of the chiefs of Nias is that of sitting upon stone seats, which are generally carved in the most elaborate and ornate manner. Modigliani saw such seats at Hili Simaetano in south Nias: one, which was like an elaborate throne (Figure 7), had been left on a hillock just outside the village until a proper site had been prepared inside for it; and another, in the form of a chair with arms, was inside the village.[1] At Bawo Mataluo

[1] 308, 311, 312, 317; Rappard, 537.

the four principal chiefs sit, during ceremonies, on stone seats placed under the four principal piles of the village-house, while the other chiefs sit upon wooden seats ranged around the walls. Sometimes, as at Hili Sindregeasi and Ono Gamofo in Irono Lase, the chiefs sit during assemblies on flat cylindrical stones which rest upon short vertical stones.[1]

In the preceding chapters it was seen that chiefs are more directly associated with the use of stone than commoners. It will therefore be necessary to follow up the clue afforded by the custom of providing stone seats for the exclusive use of chiefs.

Stone seats are reported in the Timor region. In tales collected by Wielenga in Sumba, mention is made of "the great seat" (groot zitplaats): for example, it is said that a certain I Mili Kami "stayed on the great seat with all the people".[2]

The people of Roti make stone structures, called *tutu*, which are placed either under trees or by the side of the road.[3] In the latter case passers-by sit on them and rest. They are of two forms, consisting either of a heap of stones laid in courses or roughly assembled, or else of flat stones placed on edge, with others on them, to form a structure resembling a table.[4]

The Savu people who are settled in Timor worship at a holy stone, which is kept in a house at Kupang. When they worship they sit on stone benches.[5]

Riedel gives reproductions of a stone seat by the side of a grave in Keisar, and of images seated upon heaps of stones.[6] The chiefs in Leti Moa and Lakor have stone seats called *watuliari*.[7]

The Bontoc of Luzon erect stone seats round the courtyard of their men's house, the *pabafunan*.[8] The Tangkhul Naga make stone seats of flat stones.[9] They also construct stone structures in the following way: round a mound of earth stones are placed to the height of 2 feet or more; on top of the mound is placed a large flat stone which is considered to be the most important part of the structure. These structures are about 20 feet long and 8 feet wide, and the stones on the sides are much

[1] Rappard, 537. [2] 266-7. [3] Ten Kate (i), 664, 688; Heymering, 354 *et seq.* [4] Ten Kate (i), 684. [5] S. Muller, II, 282. [6] (iv), Plate XXXVIII. [7] Plate XXXV. [8] Jenks. [9] I am indebted to Mr. Hodson for this information.

used as resting-places.[1] The Kabui also erect platforms as resting-places.[2]

Thus far we have been concerned with actual structures which are used as seats. Beliefs occur also in certain places concerning the use of certain stone structures as seats, and it will be well to consider these beliefs before drawing any conclusions from the evidence already adduced.

Ten Kate saw some graves of chiefs in Solor and Roti which

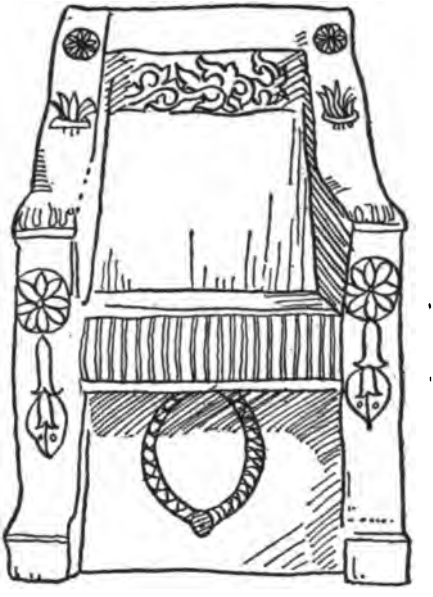

FIG. 6.—Stone Seat, Nias (after Modigliani).

had super-structures in the form of seats.[3] In Roti the *tutu* structures are supposed to be used by the ghosts of chiefs after their journey from the land of the dead.[4]

Riedel says that formerly in Ambon only chiefs were allowed to use certain of the stone offering-places. His information is interesting in view of the fact that, in the case of the *ureu*, a rough rectangular structure of stones laid in courses, which was formerly placed in the bush as a "place of retirement" (afzonder-

[1] Hodson, 190. [2] Shakespear (ii). [3] (ii), II, IV. [4] Ten Kate (i), 684.

ing), he who wished to make offerings had to sit upon the structure.[1] The fact that probably only chiefs were allowed to use the *ureu*, and that they had to sit upon it, points to a relationship between the chiefs and the structure. This relationship would be all the more definite, if it should be that the *ureu* was the only offering-place reserved for the chiefs.

The lids of the stone urns in which the dead are placed in Minahassa are shaped like the roof of a house, and on them the *orang dulu*, "the former men," are said to sit.[2] At the foot of the hill Tonderukan in Minahassa is a stone called *watu rerumeran ne empung*, "the seat of the *empung*," [3] or great and mighty spirits; or, as Schwarz says, more literally, "the stone upon which the gods are accustomed to sit".[4] A story connected with the stone states that the ancestors of the Minahassa peoples collected there to divide up the land. They assembled at the foot of the hill, Kopero sat on the north side of the hill, and Muntu'untu at the foot of the hill near to the stone, while round about sat the chiefs on stones.[5]

Some stone vats have been discovered in the districts of Napu and Besoa in central Celebes. One found in Napu is oval in shape, with a stone seat carved on the inside: it is called the "bathing-place of the chief". Several of these vats were found in Besoa. They are circular in shape, and only one has a stone seat inside.[6]

In Nias, coffins, when taken to the cemetery, are laid on stone benches while the grave is dug.[7]

The Khasi sometimes use circular cineraria of stone as seats for ceremonial occasions.[8] The stone structures which are used by the Tangkhul Naga as resting-places are memorials, and the ghost of the person, in whose memory the structure is made, comes from time to time to sit on the flat stone top during his visits to his rice-fields.[9]

The distribution of stone seats shows so many gaps that it is not possible at present to draw conclusions therefrom. But the study of their functions and associations leads to results which

[1] Riedel (iv), 56-7. [2] Sarasin, I, 11. [3] Riedel (vi), 189-90. [4] (ii), 45 *et seq.* [5] Schwarz, loc. cit. [6] Kruijt (iv), 549 *et seq.* [7] Rosenberg (i), 42. [8] Fergusson, 463. [9] Hodson, 191.

add further support for the views set forth in the preceding chapters.

	Chiefs.	*Commoners.*
Sumba:	Great seat in the middle of the village, which is probably in genera use.	
Solor:	Graves in form of seats.	
Roti:	Graves in form of seats. Offering-places in form of seats.	Sit on offering-places in form of seats.
Savu (people in Timor):	Stone benches in the house where stone is worshipped.	
Keisar:	Seat on grave of famous stone-using immigrant (see p. 108).	
Leti Moa Lakor:	+	
Ambon:	Offering-places.	
Bontoc:		In *pabafunan.*
Minahassa:	Traditional use.	
Toradja:	Traditional use.	
Nias:	+ (ceremonial).	Coffins on benches.
Khasi:	+ (ceremonial).	+ (ceremonial).
Tangkhul Naga:		+ (memorial).
Kabui Naga:		+ (memorial).

The table shows that stone seats are more especially associated with chiefs than with commoners, this association extending to the ghosts of chiefs. In addition to the use of stone seats by chiefs, and to the belief that their ghosts rest upon seat-shaped tombs or other stone structures, tradition associates chiefs with stone seats in places where till now we have found no evidence of the existence of a distinct chiefly class; in Ambon, Minahassa, and central Celebes. In Ambon and Minahassa the traditions distinctly affirm the former existence of chiefs. In central Celebes certain stone vats with seats are ascribed to chiefs. This means either that the people of Besoa and Napu have, or had, a chiefly class, the members of which used these vats, or that the latter are the work of a vanished population ruled over by a chiefly class.

The tradition of the Tontemboan, which states that the chiefs sat on stones during the council on Tonderukan, is in harmony with practice, for stone seats are used by the chiefs in Nias and, presumably, among the Khasi for this purpose.

In Roti commoners and the ghosts of chiefs use the *tutu* as resting-places. An analogous combination of belief and practice exists among the Tangkhul Naga, who erect, in honour of an important man, memorial structures which they use as resting-places, believing at the same time that they share this use with the ghost of the deceased. The Kabui Naga also make stone structures to be used as resting-places, and the erection of such structures is an act of merit.

FIG. 7.—Stone Seat, Nias (after Modigliani).

So far as the data we possess enables us to say, the Naga peoples have not a distinct chiefly class. The analogy between their memorial structures and the *tutu* of Roti is therefore significant, and suggests that, although they have no distinct chiefly class, some class distinction exists; but more information regarding the "important men" for whom the Naga erect their memorials is essential before any strict comparison can be made between the two cases.

Commoners sit upon stone seats in Roti, and among the Bontoc of Luzon, the Tangkhul Naga, and the Kabui Naga. The Bontoc and the Naga do not appear to have a class of chiefs for whom a special form of grave is made. The Bontoc and the Kabui Naga make a particular form of grave, which consists of an excavation in the side of a mountain. Among the Bontoc such graves are definitely reserved for warriors. Evidence is still lacking as to their purpose among the Kabui, but it is probable that there also such graves were made only for warriors. The use of stone seats by commoners therefore constitutes an additional link between the culture of the Bontoc and that of the Naga. So far as we know at present, the Bontoc custom is not exactly similar to that of the Naga; the former apparently have stone seats only in the courtyard of the men's house, while the latter sit upon structures erected in memory of important men.

It is possible to trace a connection, among the Bontoc, between the use of stone seats and the custom of making a grave in the side of a mountain. For the men's house, in the courtyard of which the seats are found, is inhabited by warriors. And the bodies of those warriors whose heads have been taken are placed in graves made in the sides of mountains. The use of stone seats is therefore associated, among the Bontoc, with a class of men who are distinguished from the rest of the community by the use of a special form of grave.

The evidence at our disposal goes to show that the use of stone seats, and of stone structures as resting-places, is nowhere habitual in Indonesia. It is either the prerogative of a class of people on certain occasions, or else it is connected with certain stone structures erected in memory of chiefs or important men.

CHAPTER VI.

THE USE OF STONE.

IT will now be possible to determine the relationships in distribution, function, and association between the megalithic monuments of Indonesia and the stone graves, stone offering-places, and stone seats which have been considered. Since the non-megalithic structures have been considered in groups according to their function, it will be necessary first of all to examine the megalithic monuments from this point of view, and then

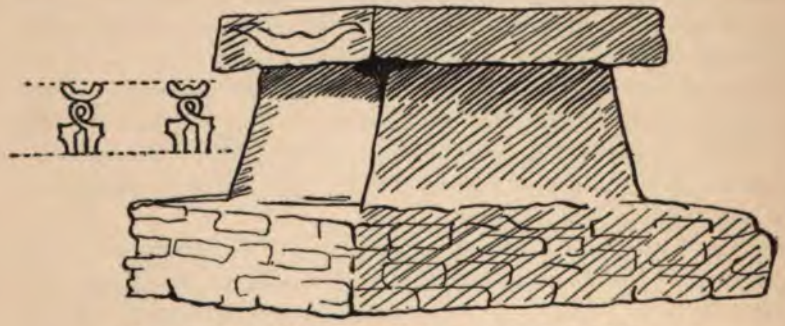

FIG. 8.—Grave of Chief at Laura, Sumba (after ten Kate).

afterwards to proceed to the comparison between the distributions and associations of the two main groups of stone-work.

Many of the megalithic monuments of Indonesia are graves. The dolmens of Sumba are graves, and are often placed round the village square.[1] Roos states that the villages sometimes consist of one street with dolmen-graves between the houses: "In the large village Laura are to be found one hundred graves, of which some are covered with colossal stones, which are flat and well worked".[2] Ten Kate mentions dolmen-graves at

[1] De Oosterling, II, 72; Alderewereldt, 581. [2] (i), 18-19.

Samparengo, where he saw a colossal stone tomb behind the chief's house, plastered white and probably, he thinks, made by people from Endeh in Flores.[1] At Laonatang the graves of the commoners were dolmens, but the grave of the chief was the structure already described (p. 11). He saw in the bush round Lambanapu ordinary dolmens of rough stones, and elaborate tombs of chiefs.[2]

The rock-cut tombs of Minahassa and central Celebes have already been mentioned. The cromlechs of the Dusun of British North Borneo mark burial places.[3] In Nias the skull and bones of a chief are often interred at the foot of the dissolith outside his house.[4]

Some of the megalithic structures are also used as offering-places. This is so in the case of the cromlech in the Kei Islands, together with the menhir described by Hugo Merton;[5] and the stone structures described in Ambon and Seran.[6] During times of scarcity the menhirs of the Toradja receive offerings (see p. 43): and an offering-place is to be found in the cromlech of Bulili in Bada.[7] Among the Khasi offerings were formerly placed upon the table-stones of the alignments, and this is still often done.[8] The menhirs, *asong*, erected by the Garo receive offerings.[9]

Many of the megalithic structures of Indonesia are memorials. The dissoliths of Nias are of this type. Probably the cromlech made by the Naga at Uilong is a memorial, for the young men dance and wrestle there once a year during a feast held in honour of the dead.[10] The *kosi* stones, which are erected by the Garo to mark the spots where men have been murdered or killed in war, are old stones and are not the objects of any cult. The Garo living at the foot of the hills on the Kamrup border erect memorial stones in honour of the dead.[11] The Kohlen clan of the Lushei erect memorial stones. A large stone at Vanlaiphai is said to have been erected in honour of Chonluma, a famous chief of the Hrangchal clan of the Old Kuki of Manipur.[12] The Mikir erect dolmens in honour of deceased chiefs.[13]

The Khasi erect memorials in honour of deceased ancestors,[14]

[1] 554. [2] 574. [3] Ling Roth, I, 150. [4] Rappard, 573. [5] Merton, 189. [6] See p. 13. [7] Kruijt (vi), 359; Grubauer, 517. [8] Gurdon, 110. [9] Playfair, 96-7. [10] Hodson, 187. [11] Playfair, 96-7; Gurdon, 138. [12] Shakespear (i), 165. [13] E. Stack. [14] Gurdon, 110 *et seq.*

and the stones bear the names of these ancestors, e.g. *ka iawbei*, the first grandmother, *u suidna* or *u kni rangbah*, the first maternal uncle. Most of the stones are erected in honour of *ka iawbei*, and food was formerly placed on the table-stone for her. A table-stone, *mawkynthei*, is erected in memory of a man who has been killed by the sword, or murdered as a victim of the cult of the snake *thlen*.

After cremation the Khasi take the ashes of their dead to the clan cinerarium. When this ceremony is about to be performed the bones are placed temporarily in the clan ghost-house, and dancing goes on from one to nine days. Meanwhile the people erect rows of three menhirs, each row having a table-stone. The menhirs are called *mawklat* or *mawlynti*, and are generally about 3 feet high. On the day on which the bones are placed in the cinerarium, three menhirs (*maw umkoi*) are erected near the cinerarium. Other kinds of memorials are the *mawbynna* or *mawnam*, put up to commemorate a parent or near relative; and the *maw-umkoi*, put up to mark the tanks, the water of which is supposed to cleanse the ashes and bones of those who have died unnatural deaths. These memorials consist of menhirs erected in alignments with table-stones in front of them. The menhirs are erected in memory of men, and the table-stones in memory of women.

The custom of erecting memorials is thus in a developed state among the Khasi. One outstanding feature of the alignments which they erect is the association of the menhirs with men and the table-stones with women. This is also characteristic of the dissoliths of Nias and Minahassa. In Minahassa the stones of the dissolith are sometimes given names. In a Tontemboan tale the upright stone is called Pokalambene and the table-stone is called Rewumbene, the first being the name of a man and the second the name of a woman. In another tale the *tumatowa* of the village Pintjep is the residence of Kelumbatu ("stone shield") and his wife Kara'anan.[1] The importance of dissoliths is shown by the statement of Schmidtmuller, that it is necessary to have a male and female stone in each village of the district of Sonder in Minahassa.[1] In Nias, the upright stones of the dissoliths, whether those in front of the chief's houses or

[1] 202-3.

those in the *dela*, are male, and the horizontal stones are female: the ghost of a chief comes to live in the upright stone of his dissolith, and the ghost of his wife comes to live in the table-stone.[1]

The ancestors of the Toradja erected seven memorial stones when they left Pamona.[2] It is said that long ago people came from Bone to fight the people of Wawu Lage (the village whence the To Lage have spread), because at this village was a miraculous tree in which two birds of the Bone people had come to live and eat the fruit. After some fighting peace was made, on the condition that the Bone people were allowed to take the tree away with them. A menhir, which was erected to commemorate the event, is still to be seen at the foot of the hill upon which Wawu Lage stands.[3]

Megalithic monuments are used as seats. When taking the ashes of the dead to the cineraria, the Khasi erect dissoliths, called *mawlynti*, upon the table-stones of which the ghosts of the dead are supposed to rest. Travellers among the Khasi rest upon dissoliths which are erected by the sides of the road and in the market-place: these dissoliths are called *ki maw jong siem* (the seat of the chief), and formerly only the chiefs were permitted to sit upon them.[4] The cromlechs in Halmahera are said to be the seats of "spirits".[5] The ghosts of the dead in Nias are supposed to rest upon the dissoliths in the *dela*.[6]

The functions of megalithic monuments therefore resemble closely those of other stone-work in Indonesia. No comment need be made upon the fact that megalithic monuments are erected as tombs or offering-places, for such uses are well known. But the custom of sitting upon stone seats is so sporadic in Indonesia, and so definitely associated with chiefs or warriors, that the use of megalithic monuments as seats suggests that the explanation of the presence of the latter form of stone-work will suffice to account for the presence of stone seats, and therefore of stone graves and offering-places. And the occurrence of memorials among both groups of stone-work constitutes further evidence in favour of the inter-relationship between megalithic monuments and the other stone-work of Indonesia.

The associations of megalithic monuments are similar to

[1] 272. [2] Kruijt and Adriani, I, 5; Kruijt (iii), 208-9. [3] Kruijt and Adriani, I, 38-99. [4] Gurdon, 141, 149, 150, 152. [5] Bastian, I, 17. [6] Ibid., IV, 56.

those of stone graves, offering-places, and seats. For the ornate dolmens of Sumba are those of chiefs in many, if not all, cases; formerly only Khasi chiefs could sit upon the dissoliths; the Mikir erect dolmens in memory of chiefs; and the Hrangchal clan of the Old Kuki of Manipur have erected a menhir in memory of a famous chief. Moreover, the Khasi and Garo erect menhirs in memory of men killed in war, and the cromlech of the Dusun of British North Borneo is placed on the spot where a chief and his followers were killed in battle; thus showing that the distinction between warriors and ordinary people is also made by people who erect megalithic monuments.

The tables at the end of this book show that the distributions of the two groups of structures are similar. Both are absent in large parts of Borneo, in north Buru, in the Mentawi Islands, in Engano, and in parts of Assam and upper Burma. All the stone-work as yet recorded in Borneo is confined to the cromlechs of the Dusun of British North Borneo and the cairns of the Kayan. Further research may reveal the presence of stone-work in this island, but it is fairly certain that no large use of stone will be recorded. It does not appear that stone is used in the Mentawi Islands, in spite of their proximity to Nias where the use of stone is elaborate. Stone-work is found in south Buru in the form of stone graves and stone offering-places, but it is absent in the north part of the island.

The megalithic monuments and the other stone-work of Indonesia are so similar in function, distribution, and association that it is not possible to consider them apart. Any explanation of the presence of one should account for that of the other. The abrupt discontinuities in the use of stone which have just been adduced serve to show that it is not possible to invoke local circumstances to account for the presence or absence of stone-work in any place. On the contrary, the presence or absence of stone-work in any place seems to depend principally upon the presence or absence of a chiefly class distinguished from the commoners by a special use of stone. If this be so, it is reasonable to suppose that the use of stone is an element of an immigrant culture associated with the presence of hereditary chiefs. I propose to put forward evidence to show that this conclusion is well founded.

Ten Kate says that some of the dolmens of Sumba are probably the work of people from Endeh in Flores.[1] The people of Savu place their land of the dead on Sumba, in the same place as the people of Sumba themselves.[2] Since the direction assigned to the land of the dead is generally the same as that of the land of origin,[3] it can be assumed that part of the population of Savu came from Sumba. The fact that some of the people of Savu, who have settled in Timor, worship at Kupang in a building where a stone is kept, and during their worship sit inside the

FIG. 9.—Grave at Lambanapu, Sumba (after ten Kate).

building on stone seats, shows that stone-using people have migrated into Timor. The people of Roti place their land of the dead in Savu.[4] In addition to this belief in the origin of a part of their population from Savu, the people of Roti have a tradition of the arrival of their ancestors in boats. The first party landed at Okelisu in Loleh, where their boat petrified; the second party landed at Danohloon in Bilba, where their boat is also petrified.[5] Some villages in Wetar collectively worship a single stone, called *sirui*, which is kept in a special house. This stone is supposed

[1] (i), 554. [2] Donselaar, 309; Roos, 61. [3] Perry (i). [4] Ibid. [5] Grafland (i), 363, 364.

to have been brought from Timor, and the people who worship it are the descendants of immigrants from Timor.[1] The ghosts of builders of houses in Leti Moa and Lakor are supposed to live in small stones which are kept in small boxes of palm-leaves in the lofts of their houses : these stones are preferably collected in Timor.[2]

It is therefore possible to trace a movement of people right across the Timor region, and the circumstances of this movement into some islands suggest that the migrants were stone-using people.

It has long been known that, scattered through the islands of the Moluccas, there are organisations of which we have but little knowledge. In each island where they exist there are two of these organisations, and they are called *Ursiwa* and *Urlima*, or *Ulusiwa* and *Ululima*, or, in Seran, *Patasiwa* and *Patalima*.[3] In Seran the *Patasiwa* are connected with a secret society, called the *Kakian*, which holds its meetings in buildings situated in the forest. The *Patasiwa* and *Patalima* live in separate villages, and in each village is a stone offering-place called *astana* (p. 12). A distinction exists between the customs of the *Patasiwa* and those of the *Patalima:* the former sit on benches during the ceremonies that they hold in their village-houses, while the latter sit on the ground; the stone offering-places of the *Patasiwa* are situated on the seaward side of their village-houses, while those of the *Patalima* are placed on the landward side: and the reason assigned for this difference in situation is that the founders of the *Patasiwa* were immigrants. The people themselves therefore supply the explanation which would be suggested by the association between the *Patasiwa* and seats and offering-places. The evidence suggests no explanation of the distinction between the *Patasiwa* and the *Patalima.*

The people of Seran have a custom in common with those of Wetar and the Leti Moa Lakor group, that of taking stones from one place to another to be used in connection with a cult. A marked example of such a custom is afforded in the Kei Islands. The island of Little Kei is of coral formation, and on it is a large sacred stone of igneous formation, which must obviously have been brought from elsewhere. It is possible that the transporters of this stone were the founders of the *Ursiwa*

[1] Riedel (iv), 436-7. [2] Ibid., 375. Ibid. ; Ekrijs.

or *Urlima* of these islands. These people place their land of the dead over the sea, each on a separate island; and thus, since the land of the dead is usually, in Indonesia, the place of origin, or in the direction of the place of origin, of the ancestors of the people who hold the belief, it is legitimate to conclude that these people are descended from immigrants.

The indigenous people of Minahassa formerly placed their dead in the branches of trees; but it is said that shortly before the arrival of the Spaniards, strangers arrived and taught the natives to place their dead in stone urns.[1] This affords good grounds for the conclusion that the use of stone was brought into Minahassa. That a relationship exists between some of the Minahassa tribes and stones is shown by the fact that, during a boundary dispute, the Tondano founded their claim upon their possession of a stretch of land where there is a cave or stone, which has given rise to their other name, Toulian.[2] When the different tribes of Minahassa separated, they assembled at a stone on the slope of Mt. Tonderukan to confer (see p. 36), and during the proceedings the chiefs sat round on stones. This is evidence of a movement of stone-using people into various parts of Minahassa, which presumably took place after the arrival of the strangers.

Moreover, the Minahassa people formerly transported stones. In one of the Tontemboan tales, a man named Makarende took a piece of the holy stone of Kema and planted it in the ground at Ka'kas. Later on he disappeared into a tree, and while there he told his son to come and cultivate the land at Ka'kas. The latter did so, but was not successful until he had obeyed the instructions of his parent: "You, my son, must go to the east and fetch a piece of the stone which I have planted in the ground, a heritage of your forefathers".[3]

The To Bada of central Celebes are supposed to have spread from three villages, on the sites of which there are stone images and pieces of stone of a kind which is not found in the hills on which the villages stand, or in the neighbouring mountains.[4] Thus, those who built these villages must have transported the stone used in their construction.

[1] Riedel (i), 379. [2] Graafland, I, 79. [3] Schwarz (i), 79, 275. [4] Kiliaan, 408; Kruijt (vi), 358.

Stones are transported in Nias. The largest dissolith of the *dela* at Sirahu in the north of the island has been brought from Ono Sitoli, the former site of the village.[1] Modigliani states that when a village is moved, the stones of the *dela* are taken too, together with the stones of honour erected in memory of the common ancestor.

There is good reason to believe that the use of stone was brought to this island by immigrants. For in south Nias, to which is confined the elaborate use of stone for seats and thrones, there is a mode of disposing of the dead which is limited to the chiefly class of this part of the island, the members of which are more closely connected with the use of stone than the commoners. The bodies of chiefs are placed in a canoe-shaped coffin; and the inference to be derived from such a practice is that the ancestors of such people were immigrants.[2]

The Khasi have a tradition of migration into Assam from the east, but this does not allow us to assume that the use of stone was brought in by this movement. Certain evidence suggests, however, that the ancestors of some of the chiefs of this people were stone-using immigrants. For the chiefs of Nongstoin, Langrin, and Nobospoh each year sacrifice a goat, at Rilang on the Kopili river, in honour of the goddess of the river. And a cavity in the rocks in the bed of the river Kenchiyang, a few miles below Rilang, is called "the god's boat". The name of this cavity recalls the petrified boat of the immigrants into Roti, and suggests that the "god's boat" is evidence of an immigration of people connected with stones into the Khasi Hills. The close connection between the Khasi chiefs and the river suggests further that their ancestors were the immigrants.

When a Garo village is moved to a new site, the *asong* stones are left, and the villagers return every year to perform a ceremony at the old site.[3]

Certain tribes of Assam speak of stones met with on their wanderings: these tales will be considered later.

The traditional accounts of migration just considered agree in associating, in many places, the use of stone with immigrants who, in some cases, were the ancestors of chiefly houses. These accounts to some degree enable us to draw aside the veil which

[1] Chatelin, 150. [2] Perry (ii). [3] Playfair, 82, 96-7.

conceals the past, and to watch vaguely the movements of unknown people who not only settled in different places, but also brought stones with them, sometimes, we are told, from their former settlements. The support which these traditions afford for the conclusion that the stone-work examined in this and previous chapters is due to some cultural influence is so strong, the traditions themselves agreeing so well with known facts, as to justify the claim that the reality of a movement of stone-using people into all parts of Indonesia has been established. This does not mean that people of the same race brought the use of stone to each island or people, but that the use of stone is an element of a culture which has been spread to all parts of Indonesia, to varying degrees, and in different ways, the introducers being strangers who often established themselves as chiefs. The building of megalithic monuments, the use of stone seats, the erection of memorials, and the use of stone for graves and offering-places, are all due to this influence. In the following chapters an endeavour will be made to discover other elements of this culture, and to account for the wide variations in its effects in different parts of Indonesia. For convenience of reference it will be necessary to adopt some term to denote the introducers of the use of stone to the different parts of Indonesia. The term "stone-using immigrants" will probably be the most satisfactory, for it avoids the necessity of discussing in any given case the provenance, whether ultimate or proximate, of the aliens and the culture that they bear with them.

CHAPTER VII.

THE SECULAR USE OF STONE.

THE argument of the preceding chapters was directed towards the demonstration of the existence of similarities of distribution and association between megalithic monuments and the other stone-work of Indonesia which performs like functions. This made it necessary to leave on one side all stone-work which was put to what may be termed "secular uses," such as stone walls round villages and houses, stone houses, pavings for villages, and steps leading to villages. But, in pursuance of the plan of examining every form of stone-work, such secular uses of stone must be considered, and it is proposed to proceed in this chapter to that task.

The open spaces of the villages of Manggarai in Flores are paved with enormous stones.[1] The village-house of Trong in Solor is built on a platform of stones.[2] In Sumba and Roti the villages are surrounded by stone walls:[3] in Roti stone walls are sometimes made round the houses,[4] which are probably sometimes made of stone.[5]

The villages of south-west Timor are on heights, and are fortified, but no information is given concerning the nature of the fortifications.[6] There are stone walls round the villages in north Belu, but in the south part of this region the villages, although situated in the valleys, are open.[7] Mr. Forbes mentions that the village of the chief of Sauo in central Timor is surrounded by a stone wall. He does not say whether the other villages are so provided.[8]

The villages in Dama, Keisar, Leti Moa and Lakor, Luang-Sermata, Babar and Timorlaut, are surrounded by stone walls.[9]

[1] Meerburg, 449, 450, 464. [2] Ten Kate (i), 241. [3] Wielenga, 264-5. [4] Ten Kate (i), 681, 683, 685, 686. [5] Jonker (ii), 23. [6] Graamberg, 180. [7] Gryzen, 43-4. [8] Forbes, 433, 444. [9] Riedel (iv), 460, 422, 379, 342, 317, 285.

Stone walls surround not only the village of Ohoinangan in the Kei Islands, but each house in it. Leading up to this village, which appears to rise in a series of terraces, is a huge staircase cut out of the solid rock.[1]

The villages in the Aru Islands sometimes have stone surrounding walls (afsluiting).[2] Stone walls are found round the villages in Watubela, and the same was the case in Ambon before the Dutch Government compelled the people to come down to the shore to live.[3] Martin gives a photograph of a village on Letimoor, an island near Ambon, which is approached by a stone staircase cut out of the rock.

The Ifugao of Luzon use stone for the retaining walls of their rice-fields, and doubtless they use stone for their villages too in some way or other.[4] The Bontoc make great use of stone. A reference to the plates of Jenks's monograph will show that houses are often partly made of stone and generally surrounded by a stone courtyard. The Bontoc also use stone in the construction of the retaining walls of their rice-terraces.[5]

Much use is made of stone in Formosa. The Paiwan have a stone wall round each house, the courtyards of which are paved with stones.[6] The west group of the Atayal use stones for the construction of their houses: their method is to erect posts of stone or wood, and then to make the walls of bamboo. The eastern group of the Atayal, when making their houses, first dig a hole from 3 to 6 feet deep, and then make a wall round the hole with the earth which has been excavated. The house is paved with stones, and the roof, which is made of flat stones, is supported by strong wood pillars and cross-beams.[7] When the Vonum make a house, they dig a shallow pit 1 or 2 feet deep, and over it make an erection of stone and wood. The floor of the house is paved with slate, and the small yard in front is paved with stones.[8] When the Tsalisen make a house, they cut into the hill-side to the depth required, and then wall up the mouth of the excavation. The walls and the front roof-supports of the house are of slate.[9] The Yami of Botel Tobago make their houses partly of stone, and surround each with a stone wall.[10]

[1] Merton, 187 *et seq.* [2] Riedel (iv), 255. [3] Ibid., 199, 62. [4] Beyer (i), 98. [5] Jenks. See Plates 2 and 3. [6] Fischer, 244-5. [7] Davidson, 564. [8] Ibid. 568. [9] Ibid., 572. [10] Ibid., 587, 588.

The only reference to the use of stone in the construction of houses and villages in Minahassa which I have been able to discover is in the book of Schwarz, where it is said that the village-houses of the Tontemboan are built on a platform of stone.[1]

In central Celebes stone was used in building those villages where megalithic and other stone structures are found. On the same hill as Bulili, where an image, a holy stone, and a cromlech are reported, there are some large fragments of stone which point to the presence, in the past, of stone structures.[2] At Watutau, another place where a holy image is to be seen, many fragments of stone are lying about on the hill.[3] Grubauer states that, farther to the south, the village-houses have foundations of stone.[4]

I have not been able to discover any reference to the use of stone for the construction of houses or of villages in Borneo.

In the island of Nias villages are paved with stones, and they are sometimes approached by means of steps cut out of the rock.[5]

The houses of the Khasi of Assam have plank or stone walls, and at least one wall must be made of wood.[6] Naga villages are generally surrounded by stockades or by stone walls. The Kabui probably used stone in the past, even if they do not do so now, for Mr. Hodson speaks of stone troughs which he saw in an old settlement in the jungle. The Tangkhul Naga use stone in the construction of their houses.[7]

The area of Indonesia is so vast, and the natural conditions are so diverse, that it could be claimed that the variations in the use of stone revealed by this survey are exactly what might be expected. Admitting that the use of stone for graves, offering-places and seats, may be due to a cultural influence, it might be urged that the material of which a house is constructed would depend upon local conditions. The lack of stone, coupled with an abundance of wood, affords, it might be said, sufficient reason to conclude that the use of wood in a given place is determined by that circumstance alone; and vice versa. But such a mode

[1] (i). [2] Kruijt (vi), 359; Grubauer, 517. [3] Kruijt (vi), 360; Grubauer, 487-8. 232, 234, 235. [5] Modigliani. [6] Gurdon, 30, 159. [7] Hodson, 42.

of reasoning, which neglects previously to inquire why houses are made at all in any given place, is apt to lead to wrong conclusions. Until such a problem is solved it is premature to talk of the material of construction depending upon local conditions.

The tables at the end of the book show that the distributions of the secular uses of stone correspond, roughly, to those tabulated in the preceding columns; megalithic monuments, stone graves, offering-places, and seats. The gaps in the distribution occur in Savu, Wetar, Seran, Buru, the region of the Posso-Todjo Toradjo in central Celebes, and Borneo, places where, with the exception of Savu and Wetar, little, if any, use is made of stone for any purposes.

Discontinuities occur in the distribution of the secular uses of stone. The villages in the north part of Belu are on the mountains and are surrounded by stone walls: those in the south part of the same district are in the valleys and are open. If considerations of convenience were the determining considerations, surely the villages in the valleys should have stone walls for defence? Those perched up in the mountains would be more effectually protected against attacks by their position than those in the valleys.

Villages in Seran are surrounded by stockades of bamboo, and this is correlated with no great development of the use of stone for other purposes, for only offering-places and stone urns for "chiefs" have been recorded in this island. On the other hand, an elaborate use of stone is recorded in Letimoor, an island off the south coast of Seran.

According to Kruijt, the To Pajapi differ from the rest of the Posso-Todjo group of the Toradja of central Celebes in having stone walls round their villages. They differ also in having stone graves for their chiefs. Thus, in this region, the practice of making stone walls round villages can be assigned to the influence of the stone-using immigrants.

This explanation will account for the general distribution of the secular use of stone in Indonesia, for the gaps and discontinuities occur, as a rule, in the same places as the gaps and discontinuities in the distribution of stone graves, stone offering-places, and stone seats.

The study of the distribution of the secular uses of stone

shows that stone is most generally used for the construction of village walls, while stone houses are only made by a few people. A comparison with the association of stone offering-places discloses an analogy, for village offering-places are the most widespread in distribution, while in but few cases do individual commoners possess stone offering-places. This similarity in association suggests that the stone-using people have exerted a widespread influence upon the village-life of Indonesian peoples, since they have introduced both stone walls and offering-places; and that their influence upon the lives of individual commoners has been comparatively weak.

Not only are stone village walls made by Indonesian peoples, but sometimes houses are surrounded by stone walls, as in Roti, Kei, among the Bontoc, and in Formosa. In Roti and in Formosa and among the Bontoc stone houses are made, and the village in the Kei Islands which has stone courtyards has also a stone stairway leading up to it. It would thus appear that stone walls round houses exist in places where stone is used to a considerable extent.

The lack of information about stone pavings makes it impossible to draw any satisfactory conclusions from their distribution and associations.

The examination of the associations of stone houses is, however, more productive of results. For stone houses are made by the Bontoc, the Formosa peoples, the Khasi, the Tangkhul Naga, and, possibly, in Roti. Of these peoples the Bontoc, Khasi, Tangkhul Naga, and the Roti people have in common the use of stone seats, or of memorial structures as resting-places, by commoners. This suggests that a relationship exists between the building of stone houses and the use of stone seats by commoners. In order to determine the validity of this inference it will be necessary to compare the distributions of stone seats and stone houses. This may be done by means of a table.[1] I have omitted from this table the case of the Savu people in Timor, who sit on stone benches during their religious ceremonies.

[1] The true significance of this and other tables in the text can only be grasped when it is remembered that they are extracted from the tables at the end of the book in order to facilitate discussion. The grouping together of different cultural elements among so few peoples as appear in this table, is, in itself, a sign of the close relationship of these elements.

PLATE I.—Igorot Council House.

	Stone Houses.	Chiefs on Seats.	Commoners on Seats.
Roti	+	+	+
Ambon		+	+
Seran		Kakian	
Bontoc	+		+
Formosa	+	?	?
Minahassa		Traditional	
Central Celebes		Traditional	
Nias		+	
Khasi	+	+	+
Tangkhul Naga	+		+
Kabui Naga			+

Some of the elements of this table must be discussed before the conclusion already arrived at can be tested. The Formosan peoples must be left on one side, for no information concerning the presence or absence of stone seats among them is yet to hand. I have included in the table the use of seats by the members of the Kakian club of the Patasiwa in Seran, for they are distinguished in this from the Patalima. They are, moreover, classed as chiefs because they are said to form a kind of nobility in the island.[1]

The cultural associations of the Kabui Naga are such as to make it probable that they made stone houses in the past, even if they do not do so now. They formerly made stone rice-mortars, which shows that they worked stone. But it would not be wise, in the present stage of our knowledge, to class them with the Bontoc and Tangkhul Naga as people who make stone houses.

If all these doubtful cases be left on one side, and the attention be confined to Roti, Ambon, the Bontoc, Minahassa, central Celebes, Nias, the Khasi, and the Tangkhul Naga, it will be seen, on examination of the table, that stone houses are made by those people who have no chiefly class whose prerogative it is to sit during council meetings on stone seats. In Nias, where only chiefs may sit upon stone seats, the houses are made of wood. And the evidence at our disposal from Ambon, Minahassa, central Celebes, where stone seats are only associated with chiefs, and the houses are made of wood, serves to confirm the conclusion that where only the chiefs use stone seats, houses are not made of stone.

[1] See p. 115.

The peoples cited in the table can be divided into three groups: in the first can be placed the Bontoc and the Tangkhul Naga, who make stone houses, and among whom no distinct chiefly class has been detected; in the second group can be placed the Khasi, who have a chiefly class, but whose commoners sit upon stone seats; and the third group includes the people of Nias, who have a distinct chiefly class, and make wooden houses. The Khasi occupy an intermediate position in their use of stone between the Bontoc and the people of Nias. This intermediate position is probably the result of an actual transition, for the commoners among the Khasi sit upon dissoliths which were formerly reserved for the chiefs. The adoption of the use of stone for the building of houses has probably accompanied this transition, for at least one wall of Khasi houses must be made of wood. This suggests that formerly the Khasi, like the people of Nias, made wooden houses, and had chiefs who alone were permitted to sit upon stone seats; that the breaking down of the distinction between chiefs and commoners was accompanied by the introduction of the use of stone for houses, but that the presence of chiefs prevented the entire adoption of the use of stone, so that, as a compromise, at least one wall of a house is still made of wood.

CHAPTER VIII.

SACRED STONES.

THE argument has now reached the point where it is necessary to turn to the consideration of the beliefs with regard to stones which are held by Indonesian peoples. A beginning will be made in this chapter by the discussion of cases where stones are the objects of cults or of special beliefs.

Stones are erected in memory of chiefs in Savu.[1] In the Belu district of Timor, in Wetar, Keisar, Leti Moa and Lakor, the Babar group, Luang-Sermata and Timorlaut, there exists a cult of small stones. In Belu small stones, called *voho matan*, which have cylindrical or elliptical forms, or are shaped like the human body, are supposed to be the residence of spiritual beings, and their importance is revealed during dreams. When such a stone has been obtained, the priest chooses a spot where it shall be placed, and there is erected a rectangular structure of stones, with a flat stone on top, on which the *voho matan* is placed. If the latter be very small, it is put under some other stones.[2] In Wetar the ghosts of ancestors and builders of houses are supposed to live in small stones. An account of one of these small stones shows who these ancestors were. This stone is called *sirui*. It is supposed to have come from Timor, and is worshipped in common by the people of several villages who are descended from immigrants from that island.

In Keisar the ghosts of the dead are supposed to visit their homes, and to live, in the lofts of their old houses, in small stones, called *wahkue* or *deran*, which are taken by an old woman from their graves, eight days after their interment. In Woorluli, Abusur, Purpura, and Labelau of this island small stones are kept in the village temple, *rumolili*.

[1] S. Muller, II, 282-3; Bastian, II, 67. [2] Gryzen, 75-6.

In the Leti Moa Lakor group the ghost of a builder of a house is supposed to live temporarily, in the loft of his house, in small stones, which are preferably collected in Timor.[1] In these islands, as well as in Belu, Luang-Sermata, and Timorlaut, travellers take with them small pieces of stone in which the ghosts of ancestors are supposed to live.[2]

Bastian mentions an image, carved roughly out of stone, on a hill in Keisar.[3] On Mt. Woluliawal, in the Babar Islands, there are two holy stones, called Wahuieliawal and Tetieilol, which do not receive offerings. In Timorlaut the ghosts of "heroes" are venerated, and one lives in a stone outside the village of Mlutu. A sacred stone stands at the head of the river Veterleli.[4]

The people of the Aru Islands worship stone dishes of east Asiatic origin.[5] Bastian says that the "Orang Kafir" and the "Orang Hindu" of these islands worship stones: the latter place offerings in stones provided with depressions.[6] Holy stones are numerous in the Kei Islands: some of them are mentioned by name; for example, Hiwur Bes at Gelanit, Watang Lawar at Tamadan, and Revut Laes at Okitait; and on the mountain at Kalaui there is an image, associated with which is the stone already mentioned as having come from another island.

Three stone images are placed at the entrance to the harbour in Kei Tanembar.[7]

Close to many villages in Seran, and generally situated on a hill near by, are offering-places, called *tampat pomali*. Each consists of a closed space of about four metres square in the middle of which is a smooth stone, carved to represent a human face.[8]

One holy stone in Buru has already been mentioned.[9]

The people of Gamsungi, on the Galela lake in Halmahera, worship a large stone shaped like a mill-stone. A piece of stone is also the "tutelary genius" of Baratako in the same island.[10]

The principal chiefs of the Monteses of Mindanao reckon among their most precious heirlooms certain stone images, which they only show to their relatives or intimate friends.[11]

The ceremonies in honour of Mendej, the god of agriculture

[1] Riedel (iv), 436-7, 421, 412, 411, 410. [2] v. Hoevell, 206. [3] II, 63. [4] Riedel (iv), 340, 283, 281, 276; v. Hoevell, 205; Bastian, II, 92. [5] Riedel (iv), 253. [6] II, 96. [7] Rosenberg (iii), 351; Riedel (iv), 220; Jacobsen, 200. [8] Ribbe, 182. [9] P. 30. [10] Kruijt (iii), 208. [11] Sawyer, 343.

of the Tontemboan in Minahassa, can only be held under shady trees, where sacred stones about 1 foot high are to be found.[1] A stone in south Minahassa is said to be the residence (zetel) of the god Senget.[2] Riedel describes two stone images on the hill Tonderukan, which represent a man and a woman.[3]

A rock called Batu Ijan is to be seen between Bolaang Mongondou and Bolaang Uki in north Celebes in a place near the former village of Tondonga, the inhabitants of which were punished by the gods by means of a flood. The only survivor of this disaster was a man called Ijan, who escaped in a boat. He clambered on to a stone which stuck up out of the water. He then called upon the gods to allow him to sink into it, and his request was granted. His descendants put offerings upon this stone in times of epidemics.[4]

Stone images have been discovered in the Bada district of central Celebes: at Bulili an image in the form of a woman half human size, and rough hewn out of a kind of limestone that occurs in the neighbourhood, is placed near a menhir inside the cromlech mentioned in the second chapter. Against it rest three small rectangular stones about one quarter of a metre long:[5] at Gintu, in Bada, there is, buried up to the neck in the ground, an image carved in the form of a human figure:[6] another stone image, reported at Watutau, is in the form of a squatting human figure with a small hemispherical projection on each side of the head.[7] Kruijt found three stone images at Pada which were about the same size as those at Bulili.[8] There are two stones at Tandong Kasa, one of which has a head and an arm. It is not known whether they are natural or artificial in formation.[9] A stone called *menganga*, "the chief's dog," on which offerings are put for the spirits of the mountains, is found on the top of the pass in the Takalla mountains.[10]

The villages of the Kenyah of Sarawak have, as their perpetual possession, large round stones. "Their history is unknown: they are supposed to grow gradually larger, and to move spontaneously when danger threatens the house. When a

[1] Graafland, I, 216-17. [2] Schwarz, 235. [3] (vi), 189, 190. [4] Wilken, III, 159. [5] Kruij: (vi), 359; Grubauer, 517; Schuut, 10 *et seq.* [6] Kruijt (vi), 358. [7] Ibid., 360 *et seq.*; Grubauer, 487-8. [8] Kiliaan, 549. [9] Kruijt and Adriani, I, 33. [10] Grubauer, 339.

household removes and builds for itself a new house, the stones are carried with some ceremony to the new site."[1] The rocks on the banks of the river on which a Kenyah village lives are regarded with superstitious reverence.[2] Perham states that among the Iban of Sarawak, "spirits and magical virtues are largely associated with stones. Any remarkable rock, especially if isolated in position, is almost sure to be the object of some kind of cult."[3] Molengraaf mentions a sacred rock on the banks of the Kapuas river below Semitau.[4] On the Mendalam, a tributary of the Kapuas, evil spirits are supposed to live in peculiarly shaped heaps of stones and rocks.[5] The Olo Ngadju of south-east Borneo have, outside each village, a stone called *pangantoho*, to which offerings are made.[6]

In Nias there are many stones carved to represent human figures; these stones are generally in the form of menhirs with a face carved on them.[7] An example exists in the island of Nacco west of Nias, where a mass of stone in the middle of a cromlech is in the form of a human face.[8] It is said that when the god Daeli came to the earth on the island of Nias, he slipped on a stone just south of Ono-Waen.[9]

At Nonjri among the Khasi sacred stones are to be seen under a fine rubber tree. Here the priest performs the village ceremonies.[10]

The Kabui Naga have a holy meteoric stone in one of their villages. Two of the best-known stones among the Mao Naga are Lungpalung, close to Lungpa, and Changchang, close to Dibua and Woromong.[11]

The Garo have certain holy stones: they believe that a large rock, shaped like a house, which is to be seen on the Kosai peak in the hills north-east of the district in which they live, is the abode of spirits; another rock, called Mabit, which is situated on the Balpakram plateau, is said to be the abode of Rokime, the mother of rice.[12]

The Thado clan of the Old Kuki of Manipur believe that evil spirits, called *shongbulanga*, live in rocks and stones.

[1] Hose and McDougall, II, 16. [2] Ling Roth, I, 353. [3] Ibid., 178. [4] 7. [5] Nieuwenhuis (ii), I, 141. [6] Kruijt (iii), 219. [7] Rappard, 537. [8] Modigliani, 344. [9] Chatelin, 117. [10] Gurdon, 34. [11] Hodson, 189; A.C.R. (1891), 224. [12] Playfair, 147-8.

Colonel Shakespear states that, above one of the hamlets of the Chawte clan of the Old Kuki, is an open space surrounded by a low wall. At the east end of the space is a small house in which are two stones. This house is the abode of Pakbangha (who is always called Pathian when the people are talking among themselves), their supreme being. At one side of the space is the house of a being called Nongchongba, the dolmen-like structure already mentioned.[1]

The Bghai branch of the Karen worship some stones on the top of a hill.[2] The Pakoo branch of the Sgaw Karen worship holy stones which are kept in their houses.[3]

A reference to the tables at the end of the book will show that the distribution of sacred stones is roughly that of the stone-work of Indonesia. The chief exception is Borneo, where we have to account for the presence of beliefs concerning stones among peoples who have no kind of stone-work. This island will therefore be examined before proceeding to the general consideration of the evidence put forward in this chapter.

Some rocks on the banks of the Kapuas are sacred; and on the Mendalam, a tributary of this river, evil spirits are supposed to live in rocks. The Kenyah regard rocks on the banks of their rivers with reverence, and also possess sacred stones, the origin of which is unknown. The Kenyah are supposed to have come down the rivers from the basin of the Kapuas in the centre of the island,[4] so it is important to learn that stones, carved with figures, have been discovered on the Mahakam, a tributary of the Kapuas, a river with which the Kenyah are certainly acquainted, for it is in close proximity to their habitat. According to tradition these stones were made by people who lived in the centre of Borneo before the Kenyah and kindred peoples arrived there.[5] The evidence therefore suggests that the Kenyah owe their beliefs concerning stones in some way to an unknown stone-using people who preceded them in central Borneo.

The *pangantoho* stones, which belong to each Olo Ngadju

[1] Shakespear (i), 207, 159. [2] Macmahon, 306-7. [3] "Burma Gazetteer" (1879), 241; Colquhoun, 77. [4] Hose and McDougall. [5] Nieuwenhuis (ii), I, 146, 278.

village in south-east Borneo, may be considered here. A tradition states that one day two bodies, man and woman, floated down the river Kahajan. They were fished out of the water by the people of Sepang, and, as it was too late to inter them, they were tied to the bank. The next morning the people of the village were surprised to find that these bodies had turned to stone. The following night a man dreamed that the petrified man and woman spoke to him, and said, "We are your ancestors and we can help you". The dreamer was appointed as priest. The man and woman came down stream from central Borneo, where stone-using people lived at some time in the past. It is therefore possible that the Olo Ngadju have acquired their cult of stones from up-stream. Additional reason for this surmise is afforded by the fact that not only are the petrified ancestors of the priest supposed to have come from central Borneo, but we have definite information that some of the Olo Ngadju are the descendants of immigrants who came from there.[1]

The cult of stones in the Timor region possesses a feature which is not found, so far as the evidence shows, in the cults of other parts of Indonesia. In Belu, Keisar, Leti Moa and Lakor, Babar, Luang Sermata and Timorlaut, importance is attached to small stones, which are supposed to be the residence of spiritual beings. These spiritual beings in Keisar are the ghosts of recently deceased relatives; but in Wetar, Belu, Luang Sermata, and Timorlaut, they are the ghosts of remote ancestors, or of the builders of houses or founders of villages. The stones which are so used in Wetar and Leti Moa and Lakor are supposed to have come from Timor.

The evidence therefore suggests that this cult owes its institution, in the islands where it is found, to stone-using people who have migrated from one island to another and there founded villages and built houses. The cult is an ancestor-cult, for only the descendants of the immigrants worship the stones connected with these immigrants: it apparently does not owe its existence to any superstitious reverence which the people of Timor and other islands have for stones in general.

The examination of the beliefs connected with sacred stones in general confirms this last remark. For sanctity is usually

[1] Kruijt (iii), 219, 344 *et seq.*

ascribed to particular stones: sacred stones are erected in memory of chiefs in Savu: single stone images are mentioned in Keisar: in the Babar and Kei Islands certain holy stones are mentioned by name: the *tampat pomali* of Seran are connected singly with villages: in Halmahera and Minahassa sacred stones are connected with chiefs and "gods": the stone images in central Celebes are few in number: and the sacred stones of the Kenyah, the Olo Ngadju, of Nias, of the Mao and Maikel Naga, are each attached singly to a village.

These sacred stones are the places of residence, temporary or permanent, of certain spiritual beings, who are usually associated as "guardian spirits" with the village where the stone is found.

The accounts of the dissoliths of the villages of the Tontemboan of Minahassa show clearly that the Tontemboan are aware of the nature of these structures. Each village must have a sacred stone, which is generally a dissolith, and the first work of those who wish to found a settlement is to select a place where it shall be placed. When a dissolith has been erected, the priest says to it, "You are really a stone, but we shall make offerings to you, and we call you Rewumbene and Poklambene". He says again, "You are really a stone, but we consider you to be the spokesman and protector of the village". The dissolith is supposed to be the bearer of a personality; offerings are made to it, and its consent is asked for various purposes.[1]

The *pangantoho* of the Olo Ngadju are the residences of guardian spirits. Formerly they were bathed with the blood of a human sacrifice before being set in place, and on setting out to fight warriors broke an egg against them. On their return home, the blood and the head of the slain enemy were brought to the stone, and the heads were placed in a hut near by.[2] The holy stones of the Kenyah are also the residences of guardian spirits.[3] The holy stones of the villages of east Nias are evidently the abodes of guardian spirits, for they are placed there in order that the inhabitants of the village may be at unity.[4] The offering-stone upon which the priest of the Mao Naga pours beer when he performs a rite, also appears to be of this nature. The Mao

[1] Schwarz (i), 201 *et seq.* [2] Kruijt (iii), 219. [3] Hose and McDougall, II, 16. [4] Kruijt (iii), 209.

and Maikel Naga have stones to which heads taken on raids are shown :[1] these stones resemble in this particular the *pangantoko* of the Olo Ngadju of Borneo.

The *asong* menhirs of the Garo which are erected at the entrance to villages are sacred, for if the village be removed the people return each year to the former site to perform a ceremony. Playfair says that two *asong* stones near one village were regarded as brothers, Chokki and Dalmang, while smaller stones round about represented their wives and children.[2] It would therefore appear that these stones are regarded as the residences of guardian spirits.

The images at Gintu, Bulili, and elsewhere in central Celebes are apparently the abodes of guardian spirits. They occur singly, associated in some cases with cromlechs in each village. They may be similar in function to the *tumatowa* of Tontemboan villages.

Images such as those erected at the entrance to the harbour in Kei Tanembar are supposed to be the residences of guardian spirits.

The next step in the investigation is to determine who these guardian spirits are. Since the distribution of sacred stones agrees with that of the stone-work of Indonesia, it is legitimate to conclude that the stone-using immigrants are responsible, directly or indirectly, for the presence of these stones, and therefore that the spiritual occupants of sacred stones bear some relationship to the stone-using immigrants. This conclusion has already been reached with regard to the small stones of Wetar and other islands eastward of Timor. It is also to be presumed that, if the Kenyah beliefs in sacred stones are due to the presence, in parts of central Borneo, of stones carved by some other people, the spiritual occupants of these stones must be related in some way to the people who carved the stones. And the same reasoning may be applied to support the contention that the spiritual occupants of the *panganto* of the Olo Ngadju of south-east Borneo are stone-using immigrants. The guardian spirits who live in the *tumatowa* in the villages of the Tontemboan of Minahassa are also probably the ghosts of stone-using immigrants. For in Nias the spiritual occupants of dissoliths are chiefs and their

[1] Hodson, 187, 189. [2] Playfair, 82, 96-7.

wives, who are, according to the scheme of this book, the descendants of stone-using immigrants.

The account of the stone images kept by the chiefs of the Monteses of Mindanao suggests that these images are tenanted, temporarily or permanently, by the ghosts of the ancestors of these chiefs, who, according to the conclusions of chapter vi., are stone-using immigrants.

The manner of distribution, and the associations of sacred stones in Indonesia, therefore suggest that the stone-using immigrants have, in addition to supplying villages with offering-places and walls, also instituted a cult connected with their own ghosts, which, in order to act as the guardian spirits of villages, live, temporarily or permanently, in stone images or sacred stones connected with these villages.

CHAPTER IX.

STONES AND TRADITION.

IN addition to believing that spiritual beings live in stones, certain Indonesian peoples possess traditions which are concerned in various ways with stones.

The Bontoc have traditions of a being named Lumawig, who came down from the sky, married one of their women, and lived at Chao-wi in the centre of the Bontoc district. Certain large flat stones, arranged in a circle, are looked upon as the foundations of his house. It is said that when he was in the Ishil mountains north-east of Bontoc with Fantanga, his brother-in-law, the latter taunted him with not being able to procure any water for them to drink. Lumawig promptly struck the side of the mountain with his spear, and out came water. Fantanga began to drink, but Lumawig told him to wait until he himself had satiated his thirst. When Fantanga at last stooped down to drink, Lumawig put his hand upon him and pushed him into the mountain. Fantanga became a rock and the water flowed through him. It is said that Lumawig taught the Bontoc to build the *fawi* and *pabafunan*, the council house and men's house.[1]

The Ifugao tell a tale similar to that related about Lumawig. Their greatest god is Wigan. His three sons were once catching fish in the canal, called Amkidul, at the foot of Mt. Inude. When they had got a supply of fish they went up the mountain. While they were climbing, one of them, Ihik, became thirsty and persistently asked for water; so, when they had arrived at an enormous rock, Balituk, another of the brothers, struck it with his spear and brought out water. Ihik desired to drink first, but was made to wait until his brothers had finished. When his turn

[1] Jenks, 200, 202.

came he stooped down, but Balituk took hold of his head and pushed it into the rock, saying, "Satiate thyself once for all, and serve as a tube for others to drink from". So the water came from his mouth.[1]

A tale recorded among the Tontemboan in Minahassa will now be quoted in detail, because much of it will be needed for reference in future chapters.

The tale is of Tengker and Kawalusan. Kawalusan was poor and Tengker was rich. One day Kawalusan borrowed Tengker's fish-hook and lost it, for the line broke while he was fishing. He went after the hook, and found himself in the land beneath the sea. While there he met the sun, who, after giving him an armband in a box, brought him back to earth and dropped him on the hill where he lived. Three days after, Tengker and his wife intended to perform the ceremony of bringing their child out of the house for the first time. The child was taken, according to custom, to a spring. When Kawalusan had calculated that the wife of Tengker and her child were in the water, he said, "I am not favoured, for, if I were, a downpour of rain would come". Down came the rain in torrents so that Tengker and his wife and child were wet through. After some time Kawalusan said, "I am not favoured, for otherwise the sun would shine". Shortly afterwards the sun came out and shone so much that the ground split.

One day Kawalusan went on a journey. After some days he opened the box containing the armband which the sun had given to him and found there a small child, named Kariso, who had been produced from the sweat caused by the rubbing of the armband against the side of the box. Kariso was brought up with the other children of Kawalusan, seven sons and one daughter, the eldest son being Maengkong.

These children set out one day from home, and during their travels one of the brothers caused a flood by saying: "Either I am not favoured, or else the sea will rise up instantly and the houses will float upon the water". Afterwards the water retired at his request.

On their way home the brothers came to the river Sariow, where Maengkong picked up a stone with two faces carved on it.

[1] Beyer (ii), 104.

When they reached the mouth of the river Rano Wangko, Maengkong said to the stone, "I shall leave you behind to be an object of worship for the people here". The stone shook to express its disapproval. Maengkong and his brothers then went south in the direction of Amurang, naming the places from Sondaken southwards. At Amurang, Maengkong again offered to leave the stone, but it refused. When they had arrived at Tombara'an, which is situated on the boundary of Sonder and Kawangkpan, they heard the favourable note of an omen bird, and stayed there and built a house. The stone with the two faces was placed with one face to the south and the other to the north. The river from which they got their water while living there was called Rano i Mokei. It derives its name from its origin, for Maengkong made it spring out of the side of the hill by uttering a word. When Maengkong left the settlement he caused the stream to sink into the ground.

After a time Maengkong separated from his brothers, who then went westward, naming places as they went. One day they decided to build a house, but had only made two stone piles when they moved on again. This place was called Ari'i on account of the two stones. They continued on their journey to the west until they came to a place where they could see Nimaga below them. They sought much for water with which to wash their hands and faces, but only found large stones. They then brought out the armband from its box, and, sticking thorns into it, said to a certain rock, "Water must come out of you, stone". Thereupon water gushed out of the rock, and continued until they had all washed their hands and faces. After that they still went to the west, and finally reached Mongondou, where they founded villages.[1]

In a tale from the Sangir Islands, which are situated to the north of Minahassa, it is said that a chief one day heard voices singing inside a stone. After a time some people came out of the stone, but they fled when the chief showed himself. Another tale states that a child was put on a large stone by the side of the sea. The stone grew up to the sky with the child sitting on it.[2]

The Toradja have a tradition that, in the days gone by, before

[1] Schwarz (i), 352. [2] Adriani (i), 38-40, 156.

the folk spread from Pamona, a place near Lake Posso, a youth called Lasaeo, "the sun-lord," came riding upon a white buffalo. He married a woman of the people named Rumongi. He taught the people agriculture and rice-growing. He cut off the head of a white buffalo and threw it into Napu and Bada, and from this head sprang many buffaloes. The body he left on the banks of Lake Posso, where it gave rise to many buffaloes. Later on the trunk of the buffalo turned into a stone, which may still be seen on the hill where Pura stands. Lasaeo returned to the sky up a creeper. His wife tried to follow him, but Lasaeo cut the creeper and both she and the creeper were turned to stone.

The son of Lasaeo and Rumongi was Tuwun Toljo, "the vital power of sulphur". His son, Oli nTambo, became the mythical hero Guma ngKoana in Napu. Others say that the son of Lasaeo was called iDori, and that he became the ancestor of the chiefs of Waibunta, in Luwu. iDori was chief of Pamona. One day, hearing that a niece of his father lived at the mouth of a river, he decided to visit her. When he left Pamona the people also departed and erected the memorial stones. On the way to find his cousin he and his slave stopped for the night at Wawu Endo, and, as iDori was badly clothed, the people of the house mistook him for the slave. They gave water and palm-wine to the slave, but nothing to iDori. He thereupon went below the house and struck two rocks with his spear. Water came from one and palm-wine from the other. When he had finished drinking he closed the rock out of which he had got the palm-wine, but left the other. He found his cousin and married her. They did not die, but turned into two white stones which are now kept in a special house and worshipped.[1]

Another mythical hero, Tamangkapa, also turned to stone. He descended into the underworld, and, when he wished to return home, its inhabitants told him to go on until he came to a forked path, when he was to take the branch leading to the left. He did so, and came to a river over which was a tree-stem. When he tried to cross by this log, it began to move violently, and so he tried the other path, which led him to the constellation Tamangkapa (Pleiades) in the sky. There he found life very agreeable, and the inhabitants taught him agriculture. One day

[1] I, 22 *et seq.*

he climbed to the loft of the house where he lived and found that he could see the earth. He jumped down and landed near his own home. He called the people of the village together, and told them all that he had learned about agriculture. He added that in seven days he would turn into a stone, and this stone may still be seen on the south side of Lake Posso.[1]

Other tales connecting men with stones are present in central Celebes. Two stones called *naga* are to be seen at the village of Tando ngKasa. One has arms and a head. It is said that while some Luwu men were storming this village, a piece of stone detached itself from the cliff and killed some of the attackers. They became petrified, and the fragment of cliff which killed them is still to be seen on a rock to the east of Tando ngKasa.[2] It is said that a stone used to lie across the way to Bomba. The wife of a chief, wishing to pass by, hit the stone with a dracaena leaf, whereupon it turned round. One of her followers hit it with his spear, and out of it came palm-wine.[3]

Tales are related about certain stones at Pakambia. Once the people of this place were at war with the To Lage, who, after a time, were willing to acknowledge themselves beaten, but dared not send a hostage to say so. At last a Pakambia woman, who was married among the To Lage, offered to go, and set out at night with a female slave. When they were some way from the village, she cried out that the To Lage acknowledged themselves beaten, and that they sent a slave to be sacrificed. The slave was killed upon a stone, in which her ghost still lives.[4]

Among the legends recorded in Nias is one which states that Sirio, the race father, had nine sons, one of whom, Lahari, had a stone navel. Two of these sons were sent to support the earth, and one of them was turned to stone.[5] In some of the texts collected by Sundermann, we are told of a chief whose house was founded on a rock. The earth is supposed by the people of Nias to be supported on a rock.[6]

The Tangkhul Naga say that they are descended from immigrants who, after emerging from a stone in the Manipur valley, migrated into the hills. They say that, after these ancestors got fire from a stone near Ukrul, they divided, some

[1] Kruijt and Adriani, II, 237. [2] Ibid., I, 33. [3] Ibid., I, 35. [4] Ibid., I, 60.
[5] Chatelin, 116; Modigliani, 617. [6] Sundermann (i), 400.

going to Sirohi and others to Ukrul. The Tangkhul of Sirohi also claim to have procured fire from a stone at Ukrul.[1]

The discussion of these tales can perhaps best be opened by a consideration of one related by the Bontoc of Luzon.

They say that a being, named Lumawig, came from the sky and lived among them for a time before returning once again to his home. He married a Bontoc woman, taught the Bontoc agriculture, and gave them a code of morals. He was connected with stone, for he is said by the Bontoc to have taught them to make the men's house and the council house, both of which are stone buildings: the stone foundations of his house are still pointed out: and he is reported to have turned his brother into stone.

In the discussions of previous chapters, it was concluded that the use of stone had been introduced to Indonesia by certain immigrants. These strangers settled down in some places and founded lines of chiefs. But this was not so in the case of the Bontoc. For among them warriors are distinguished from the rest of the people by the use of a special form of grave and, probably, by the use of stone seats, which are placed in the court-yard of the men's house, the dwelling of the warriors. This association between warriors and the use of stone was ascribed to the influence of the stone-using immigrants. Bontoc tradition claims that not only the men's house and other stone-work, but also the institution of head-hunting were due to Lumawig. Thus a building which was supposed to owe its existence to the influence of the stone-using immigrants, and a custom which is bound up with men who are distinguished from the rest of the community by a special use of stone, are ascribed to an immigrant. So, on the basis of the close agreement between traditional and other evidence, we may conclude that the tale of Lumawig is an account of the coming of stone-using immigrants among the Bontoc.

One difficulty must be removed before we can make this assumption with confidence. The stone-using immigrants have, according to the conclusions reached in this book, founded lines of chiefs in various parts of Indonesia. Lumawig, who is supposed

[1] Hodson, 10.

to be one of the stone-using immigrants, married one of the Bontoc women. How is it then that his descendants do not form a class of hereditary chiefs?

Fortunately it is not necessary to have recourse to speculation to account for this fact, for the Bontoc themselves supply the answer to the question when they say that the children of Lumawig were killed and buried outside Bontoc in a place where a ceremony is held once a month. It may therefore be claimed that the traditions of the Bontoc are in close agreement with the evidence and with the conclusions already reached from the consideration of the stone-work of Indonesia.

A being similar to Lumawig is said to have arrived among the Posso-Todjo Toradja. He was Lasaeo, the "sun-lord," who married a Toradja woman. He taught the Toradja agriculture and rice-growing and gave them a supply of buffaloes. When he returned to the sky, his descendants departed from Pamona, one to found a line of chiefs at Waibunta in Luwu, the other to become the great chief of the To Napu, a people who possess a nobility.

Lasaeo and his sons are connected with stone. The buffalo upon which Lasaeo arrived and his wife, together with the creeper up which she endeavoured to climb after him, were petrified; iDori, Lasaeo's son, caused water and palm-wine to emerge from a rock; and when iDori left Pamona, seven menhirs were erected.

The associations of Lasaeo and his descendants with stone and with the custom of erecting memorial stones, together with the agreement which exists between the tale and the cultural conditions of central Celebes, suggest that the account of Lasaeo is also a tradition of the arrival of stone-using immigrants, in this case among the Posso-Todjo group of the Toradja.

Lasaeo and Lumawig bear some resemblance to each other in that they both are connected with a world in the sky. They are the only two such people as have as yet been mentioned in this book. Some remarks upon the significance of the presence of such beings on earth will be made at the end of this chapter.

Another tale, which recounts the wanderings of people associated with stone, is that of Tengker and Kawalusan, which is told by the Tontemboan of Minahassa. The Tontemboan are

one of the four tribes of Minahassa. In chapter vi. it was said that stone-using immigrants introduced the use of stone burial-urns to Minahassa. It was also said that the various Minahassa tribes held a council meeting before separating. No signs have as yet been detected of the existence, among these tribes, of a chiefly class, the members of which are distinguished from the rest of the community by their use of stone. We have only learned that chiefs sat on stones during the council on Tonderukan. This evidence suggests that, so far as we know, the various tribes of Minahassa were more or less democratic, with no distinct chiefly class, when they moved from Tonderukan to the different parts of Minahassa.

These circumstances fit the case of the tale of Tengker and Kawalusan. Kawalusan's sons migrated from place to place, carrying with them a stone image, founding and naming villages and building houses on stone piles. This shows that they were acquainted with the use of stone. But, although they brought water out of rocks, they are not said to have been descended from the people of the sky-world, nor do their descendants appear to have become chiefs. Their father was, according to the tale, a man of the earth. The account of the movements of Kawalusan's sons through Minahassa is therefore, according to the evidence derived from the tale and from the examination of the stone-work of the Tontemboan, that of people who have migrated after acquiring the use of stone, not of stone-using immigrants such as Lasaeo and Lumawig.

Other peoples of Indonesia have traditions similar in nature to that of the Tontemboan. The Naga peoples of Assam have no chiefly class, and they do not claim to have acquired the use of stone from strangers. The Tangkhul say that they have migrated, and, as mention is made of stones in connection with their movements, it would seem that they have migrated after acquiring the use of stone. Good reason also exists for concluding that the Kabui have migrated after acquiring the use of stone, for Hodson mentions stone-work in some of their old settlements further south.

The traditions recorded in this chapter can be divided into two groups. The first comprises those which tell of the arrival of

beings from the sky, who introduce agriculture and probably other arts and crafts. The second includes those which tell of the migrations of peoples who have acquired the use of stone. As far as we know, none of the peoples discussed in this chapter have a class of hereditary chiefs who are distinguished from the commoners by the use of stone seats or stone graves of a special sort or size. Neither Lumawig nor Lasaeo left descendants among the people who tell of them. And the Minahassa and Naga peoples have, so far as we have been able to discover, no chiefs. The apparent lack, among people who have a class of hereditary chiefs, of any tradition which accounts for the manner in which the use of stone has been acquired in such places can hardly be due to chance. It must rather be concluded that for some reason or other, in places where the stone-using immigrants have settled, traditions do not tell of their arrival.

In preceding chapters it was concluded that the stone-using immigrants carried stones about with them, and that they were responsible for the presence of sacred stones in which their ghosts live as guardian spirits. In this chapter further evidence in support of this conclusion has been forthcoming. For, in the tale of Tengker and Kawalusan, the sons of Kawalusan carried about with them a stone image which was to be placed in a village as an object of worship; in the tale of Lasaeo it was said that iDori and his wife turned into stone images which are worshipped; and offerings are put on the graves of the descendants of Lumawig.

The study of tradition has made it possible to understand in some degree the manner in which the stone-using immigrants have influenced the cultures of the indigenous peoples of Indonesia. It has also made it necessary for us to consider a matter which will be of fundamental importance in this book. The traditions of Lumawig and Lasaeo, the strangers who brought the culture associated with the use of stone among the Bontoc and Toradja, agree so strictly with known facts that it is difficult to refuse to admit either that Lumawig and Lasaeo were personages, or else that they are the traditional representatives of

a group of stone-using immigrants. In either case they were human beings.

In the traditions quoted in this chapter Lasaeo is called the "sun-lord"; both he and Lumawig are believed to have come from the sky and to have returned thither; and they are credited with powers which are not possessed by men. They are therefore what are commonly called "divine beings".

According to the scheme elaborated in this book, the stone-using immigrants have left behind them descendants who are chiefs. This would lead us to expect that the hereditary chiefs of Indonesia who are thus descended claim to be of "divine descent". This is so among the Sadang group of the Toradja. The chief of Makale is said to be descended from Puang Matowa, the supreme being, who lives in the sky. Puang Matowa is said to have come down to earth and to have married a princess of the underground world. His three sons became chiefs of Goa in south Celebes, of Luwu as far as Kolaka, and the third acquired the Toradja lands.[1] Thus a hereditary chief, who, since he rules over people who erect megalithic monuments, is probably the descendant of a stone-using immigrant, claims descent from a being who is similar to Lasaeo and Lumawig, the latter of whom is the supreme being of the Bontoc.

When the supreme being of one people is, so far as it is possible to decide from the evidence, a historical personage, and living chiefs of another people claim descent from their supreme being, it becomes necessary to determine what shall be the attitude in this book towards such beings. The investigations of the preceding chapters have been carried out with as few preconceptions as possible. This attitude of mind was essential when dealing with material objects which can be described in language that admits of no doubt. It is doubly so in the examination of facts such as those just considered. I shall therefore consider the phenomena in question solely as facts. I shall assume at present that peoples such as the Toradja and Bontoc have preserved traditions of stone-using immigrants. These strangers are reputed to have had powers beyond those possessed by ordinary mortals; they are said to have come from a world in the sky and to have returned there. The immigrants

[1] Grubauer, 209.

have, in some cases, founded chiefly houses, the members of which claim descent from denizens of the world in the sky. And the ghosts of these immigrants are supposed to live, temporarily or permanently, in stone images and to act as the "guardian spirits" of villages.

In what follows I shall sometimes, for convenience, retain the word "god" when quoting from other writers. But when speaking of beings such as Lasaeo or Puang Matowa, I shall use terms such as "sky-people" to signify that they are associated with a world in the sky, and shall leave the elucidation of the significance of the term "god" to a later stage of the argument when the facts themselves will have provided the means to enable us to reconsider this matter. In this way it will be possible to avoid any assumptions concerning the relationship between these beings and the people who are reported to believe in them.

CHAPTER X.

STONE ORIGIN MYTHS.

IN the last chapter it was found that the traditions of Indonesian peoples agree closely with the results gained by the examination of the different forms of stone-work that they make use of. Some of these peoples, in addition to recording traditions which enable us to understand to some degree the manner in which they acquired their use of stone, also possess tales of their origin which are connected with stones. These tales will be examined in this chapter.

The first ancestress of the race in the Luang-Sermata group is supposed to have descended from the sky down a creeper, the petrified roots of which are still to be seen on the island of Nowalna.[1] It is also said that a man of Luang-Sermata, while out fishing, brought up in his net a stone which he threw back into the sea. A second time he fished it up, and, warned not to throw it away, took it home. At the end of nine months the stone burst and out of it came a boy. He married his foster-sister, and they were the ancestors of the Patumera (red-stones) clan.[2]

The great kindness of Mr. Shinji Ishii enables me to publish the following origin myths from Formosa:—

The Taiyal, who dwell in the mountain region of north Formosa, have a tradition of the origin of their tribe which runs as follows: A rock once stood on the top of Mt. Papakuwake (Mt. Taihasen in Mr. Ishii's work). One day this rock split, and out of it came a man and a woman, the ancestors of the Taiyal. The place where the rock existed is called Pinsabakan, "fissure" or "crack". "This tradition," says Mr. Ishii, "is held throughout most of the Taiyal villages."

A sub-tribe of the Paiwan called Pomomakka, who live in the

[1] Riedel (iv), 312. [2] Bastian, II, 62.

southern part of Formosa, have a similar tradition. Their ancestors, a man and a woman, came out of the natural fissure of a rock on the top of Mt. Diabu (10,660 feet high), the highest mountain in southern Formosa. The rock in question was lowered down from the sun, being born from that body.

The Yami of Botel Tobago say that their ancestors were born out of the fissure of a rock.

Other variants of origin myths have been collected in Formosa. The Paiwan round Lilisha state that a stone burst, and out of it came their ancestors, a man and a woman.[1] The Ami believe that their ancestors were born from a stone on the mountain near the Chipun river.[2] The ancestors of the Puyuma came out of a stone at the foot of Mt. Aravanai.[3] The Tsalisen state that their ancestors came out of the moon. In the house of a chief of this people is a spherical stone which is said to represent the moon.[4]

Schwarz gives variants of the origin myths of the Tontemboan of Minahassa. The first says that a stone once stuck out of the ground somewhere in the east. When the sun rose the stone became hot and sweated. The sweat became a lump which finally burst, giving birth to Lumimu'ut, the ancestress of the Tontemboan. Another account states that there was once a stone as large as a house in the middle of the sea. The waves played over it, and after a time a crow emerged. The stone then sweated, and out came Lumimu'ut.[5] According to a Toumpakewa version, a sky-being made the earth and caused all things to grow. It happened one day that the south wind was blowing, so that a large mass of foam was carried by the waves and finally left high and dry on the shore. Day after day the sun shone upon the foam, till it began to move and work itself deeper into the sand. Finally it gave birth to a youth. One day when walking this youth came to the mouth of a river, where he heard the sound of a child crying in a heap of stones. He listened and said, "Perhaps it is some one who lives here". He looked for the weeping child, and saw that a small girl had sweated out of a stone, to which her navel-string was still attached. He cut the navel-string with a bamboo knife. He married the girl, whose name was Lumimu'ut, for she had sweated out of the stone, or Kariso.

[1] Fischer, 241. [2] Davidson, 579. [3] Ibid., 578. [4] Ibid., 574. [5] 291.

The story goes that she had been produced by the friction of two stones.[1] The Toumpakewa say that two stone images on the hill Tonderukan are supposed to be Lumimu'ut and To'ar, the ancestors of the Minahassa peoples.[2]

The Posso-Todjo Toradja have two variants of a myth of origin in which the first ancestors were made in the form of stone images. One version states that iLai, a being of the sky-world, and iDai, a "goddess" of the underworld, ordered Kombungi to make human beings. He did so, but while iLai and iNdara had gone up to the sky to get the eternal breath, Kombungi allowed the wind to blow on the images so that they became living beings. According to the other variant, Pue mPalaburu, one of the sky-people, made the first men out of stone.[3]

I have not been able to trace, in the literature concerning the peoples of Borneo, any definite myths which connect the first men directly with stone, except the following tale recorded by Bastian. "Besides the sun and moon, and stars, the Pari (in Borneo) worship the creator Minjanni, who, with Sempulon, made men and animals out of stone."[4]

The ancestors of the Khasi chiefs of Nongkrem and Myllem are said to have come out of a rock situated not far from the Shillong peak in the Nongkrem direction.[5]

A large stone at Maikel is said to be on the spot where the first ancestors of the people came out of the underground world. Another account says that the Maikel folk "originated" from this stone. They are also supposed to have "originated" from a stone between Longsa and Sangtam. The ancestors of the Tangkhul Naga are said to have emerged from a stone in the Manipur valley.[6]

The ancestors of the Kabui are said to have come out of a split stone at Aqui, at a spot called Lingding yong.[7] The Lushei say that the auk once swallowed the sun, and thus plunged the whole world into darkness. A number of large rocks in the *van-lai-phai* represent the petrified remains of the

[1] Boddé, 222-3. [2] Riedel (vi), 189-90. [3] Kruijt (iii), 468; Kruijt and Adriani, I, 245; II, 82; Kruijt (i), 339. [4] IV, 9, 13. The term "pari" is a corruption of "padi," and denotes the rice-growing tribes, among whom the Kayan are prominent. [5] Gurdon, 115. [6] Hodson, 10, 12, 13, 14, 187, 198; A.C.R. (1891), 224, 241. [7] Hodson, 127.

buffaloes of the Chhura which were grazing there at the time. The earth was re-peopled by men and women, who issued from the ground by means of a hole covered with a stone.[1] The Chawte clan of the Old Kuki of Manipur say that their ancestors came out of a hole in the ground which was covered by a stone.[2]

The ancestors of the Tashon branch of the Chin came out of a large rock at Shunkla, and the ancestors of the Whenho came out of the rocks at Sepi.[3]

These tales vary much in content. They can, however, be divided into two groups; one contains what may be termed "creation myths," in which the first members of the race were made by some personal agency; the other contains those tales which state that the first ancestors came out of stones without the aid of any personal agency.

The creation myths are recorded among the Posso-Todjo group of the Toradja and, in central Borneo, among peoples allied to the Kayan and Kenyah. In both cases it is said that beings of the sky-world made the first man and woman in the form of stone images.

An analogous form of creation myth is recorded among the Iban of Sarawak. They say that one of the sky-people, Petara, commanded Salampandi, another sky-being, to make men. She tried first to carve them out of stone, but the images could not speak. She then tried iron, without success. Finally she tried earth, and the two images spoke. The Sakarran branch of the Iban have a variant of this tale in which the supreme being created two birds, male and female. These birds in their turn created the sky, then the earth, and finally the Batang Lupar river. Finding that the earth spread out more than the sky, they heaped it together and so caused the mountains. They then tried to make men, experimenting in turn with trees, stone, and earth, and succeeded with the last substance.[4]

Neither the Posso-Todjo Toradja, with the exception of the To Pajapi, who have chiefs, nor the Borneo tribes with the exception of the Kayan, who place cairns over the bodies of men who have been "murdered," use stone for graves or village

[1] Shakespear (i), 92-4. [2] Ibid., 151. [3] Scott, 458; Carey and Tuck, 143, 148, 198. [4] Ling Roth, I, 176, 299.

walls. These peoples do not appear to possess a chiefly class, the members of which are placed in a special form of grave. But the Toradja and the Borneo peoples have had contact with stone-using people. The case of the Toradja was discussed in the last chapter. It was found in chapter viii. that the Kayan, Kenyah, and kindred tribes of Borneo were preceded in the centre of that island by people who made the stone images which have been discovered on the banks of the Kapuas and its tributaries. And the beliefs held by the Kenyah with regard to sacred stones were referred in that chapter to the influence of these stone-using people.

Although the Posso-Todjo Toradja and the Borneo peoples have been in contact, more or less remote, with stone-using people, they have not learned to carve stone.

The evidence therefore suggests that the form of creation myth in which the first ancestors of the race are made by sky-beings out of stone-images, is found among peoples who have had contact with the stone-using immigrants of such a kind that the latter have neither settled among them to form a chiefly class nor taught them to work in stone. The effect of this manner of contact is to lead peoples such as the Posso-Todjo Toradja to remember the stone-using people as beings connected with the sky and possessed of powers which they themselves lack. One of these accomplishments is that of making stone images.

But the possession of such a craft would hardly of itself make the indigenous peoples remember the strangers as beings who could actually create men out of stone images. It is therefore necessary to inquire further into this matter, and to endeavour to divine some reason for the belief that the stone-using immigrants could animate images.

The Toradja account of the creation of their ancestors relates that, when the images were carved, the sky-beings went up to the sky to fetch thence the breath of life with which to animate them. While they were gone, the images were animated by the wind.[1] In the Borneo version the makers of the images endeavour to cause them to speak. And a tale from Halmahera, recorded among people about whom I have no information,

[1] Kruijt (iii), 469.

states that the supreme being, who lives in the sky-world, made a man of clay. When he had gone up to the sky to fetch down the breath of life with which the image was to be inspired, an evil spirit destroyed his handiwork. The supreme being thereupon made man out of the excrement of the evil spirit.[1]

The real point of the tale seems to lie in the process of animation of the image by the sky-people, who alone appear to have this power, for the breath of life is kept up in the sky. It is to be noted that in the Toradja version the images are not actually animated with the breath of life from the sky, but by the wind. In this they present a contrast to the people of Nias, among whom each child is animated at birth with breath drawn from a store in the sky, to which it returns at death (see p. 152). The evidence thus suggests that the stone-using immigrants brought with them the idea that the life of human beings is maintained by the presence in them of breath derived from the sky, and that this idea forms part of the beliefs of the peoples among whom they have settled as chiefs claiming descent from the sky-world. On the other hand, people such as the Posso-Todjo Toradja, among whom the stone-using immigrants have not settled, appear to claim, in their tale of creation out of stone images, that they do not possess the breath of life, and thus have no relationship with the world in the sky.

The Bontoc have preserved a tradition of the arrival of the stone-using immigrants which resembles in more than one detail that of Lasaeo, the being who brought the use of stone among the Toradja. Neither the Bontoc nor the Toradja have a class of hereditary chiefs. These cultural similarities suggest that the Bontoc ought to possess a creation myth similar to that of the Posso-Todjo Toradja. But a marked difference exists between the cultures of these two peoples. The Bontoc make considerable use of stone, and the Posso-Todjo, with the exception of the To Pajapi, do not use it at all. This shows that the Bontoc must have had much more prolonged and intimate intercourse with the stone-using immigrants than the Posso-Todjo Toradja. So it would appear that to this cause must be attributed the absence among the Bontoc of a myth of origin from stone images.

[1] Kruijt (iii), 471.

The tale which recounts the origin of a people from ancestors who emerged from a stone is reported in Luang-Sermata, Formosa, among the Tontemboan of Minahassa, the Tangkhul, Kabui and Maikel Naga of Assam, and the Chin tribes of Upper Burma. The Tontemboan of Minahassa, and the Tangkhul and Kabui Naga are peoples who, as was seen in the preceding chapter, have apparently migrated after acquiring the use of stone. The ancestors of the Patumera clan of the Luang-Sermata Islands were probably immigrants acquainted with the use of stone. For, according to Bastian, they are also present in the Leti Moa Lakor group, and they place their land of the dead over the sea, which suggests that they are of alien origin.[1] It is possible, too, that the Formosan tribes have also migrated after acquiring the use of stone.

The form of origin myth in which the first ancestors are said to have come out of a stone, therefore appears to be recorded only among people who have migrated after acquiring the use of stone.

This agrees with the Khasi tradition that the ancestors of some of their chiefly houses emerged from stones. The chiefly houses of Indonesia are supposed to be the descendants of stone-using immigrants. But these ancestresses of Khasi chiefs seem to differ from those stone-using immigrants who arrived in such places as Nias; for they emerged from stones, and therefore, if we accept the conclusion just arrived at, were people who settled among the Khasi after acquiring elsewhere the use of stone from the stone-using immigrants. This marks a difference between the culture of the Khasi and that of such places as Nias which will become more apparent as the general argument proceeds.

The tribes of Assam and upper Burma who believe that their ancestors came out of stones are the Tangkhul and Kabui Naga and the Chin. With the possible exception of the Chin,[2] these tribes erect stone memorials upon which travellers sit, and build stone houses or work in stone. They therefore make more use of stone than the other tribes of this region. Certain other stone-using tribes of this region, the Maikel Naga, the Lushei,

[1] II, 62. [2] Lack of definite information in reference to their use of stone calls for this reservation.

and the Chawte clan of the Old Kuki of Manipur, say that their ancestors came out of the underground world by means of a hole in the ground which was covered by a stone.

In a paper on "Myths of Origin and the Home of the Dead in Indonesia," I have quoted examples to show that those peoples who inter their dead generally believe that their ghosts go into the underground world, which is the supposed place of origin of their race. The peoples in question inter their dead, and therefore would be expected to believe that their ancestors came out of the underground world. The Maikel say that a monolith at Maikel itself marks the spot where their ancestors emerged. According to the conclusions already arrived at, the importance attached to this stone would be due, directly or indirectly, to the influence of the stone-using immigrants. Thus it would appear that the form of origin myth in which the ancestors of the race came out of the underground world by means of a hole covered by a stone, is due to the adoption, by the same people, of the culture associated with the use of stone, and of the practice of interment.

I do not propose to pursue this matter any further at present, but shall leave the consideration of the problem of accounting for the different forms of origin myths in Assam and upper Burma until fuller knowledge is available.

It would be interesting to endeavour to trace out the connection between the creation myths of the Toradja and the origin myths of people such as the Tontemboan, which say that their ancestors emerged from stones. It would not be a profitable occupation in the present state of our knowledge, and the attempt must be made when more evidence has been collected. It is important to note, however, that the myths discussed in this chapter have not been recorded among people who have hereditary chiefs claiming to be descended from people of the sky-world, and to enjoy the privilege of sitting on stone seats, and are otherwise distinguished from the commoners. The peoples with which we have been concerned are those such as the Posso-Todjo Toradja, who have had slight contact with the stone-using immigrants, and others such as the Tangkhul Naga, who have acquired a considerable use of stone and then have migrated. In these

cases the stone-using immigrants have so impressed themselves upon tradition that the history of the tribe or people dates from a time after they had had contact with the strangers. Both creation and origin myths of such peoples are expressed in terms of the use of stone.

This chapter concludes the first portion of the main argument of this book. The evidence afforded by the consideration of stone-work suggested that megalithic monuments, together with the whole of the stone-work of Indonesia, owed their existence in Indonesia to the influence of immigrants who have left their descendants as chiefs in certain places, and in others have caused warriors to be distinguished from the rest of the community. These strangers are remembered as beings connected with a world in the sky, and their chiefly descendants claim descent from beings of the sky-world.

The investigation has disclosed a marked agreement between the tales recorded among the peoples of Indonesia and the various manners in which stone is used by these peoples. In no case has any substantial disagreement become apparent. On the contrary, each chapter has added new items of information which agree with those already gained. If facts collected at random enable us to see a certain distance into the mist that surrounds us, how much more light may we hope for when ethnographers deliberately collect information that will throw light upon the many dark places which have been brought into relief in the course of the discussions of this book.

The second part of the main argument will be concerned principally with the sky-world and the beings, celestial and terrestrial, who are connected with it. In the succeeding chapters certain clues disclosed in the evidence already adduced will be followed up, and the consequent developments will throw much light upon the meaning of the knowledge which has already been gained.

CHAPTER XI.

BELIEFS CONCERNING THE SUN.

THE examination of the various forms of stone-work that Indonesian peoples make use of, and of the beliefs concerning stone which have been recorded among these peoples, has shown that the use of stone in Indonesia can best be accounted for by ascribing it to the influence of an immigrant culture. It is now necessary to proceed to the second part of the inquiry which has been instituted in this book; to examine the sun-cult which is reported among certain Indonesian peoples, with a view to determining the relationship between this cult and the use of stone.

In accordance with the attitude which was adopted in chapter ix., I shall not attempt to define the "sun-cult," but shall allow that term the widest possible meaning. I shall also substitute "sun-lord" for "sun-god," so as to avoid any assumptions concerning the nature of such beings.

The sun-cult is reported among all the peoples of the Timor region of which I have knowledge, with the exception of those of Sumba, Savu, and the Belu district of Timor. The absence of a sun-cult in these places may be capable of two interpretations. It may be due to the disappearance of a former sun-cult, or it may constitute evidence that the indigenous peoples of Indonesia have not themselves come to regard the sun as a being who must be propitiated and to whom offerings must be made. In that case the absence of a sun-cult in certain places will be due to the fact that it has not been introduced there.

In the Timor region a sun-cult is reported in Sumbawa among the Do Donggo of the Bima hill district; in the Sicca district of Flores; in Roti, where the sun is looked upon as a mighty being; in south-west Timor, where a being called *Usineno* lives in the sun; in east Timor; in Wetar, where the people worship *Paibei wawaki*, "the great lord of old," who lives in the

sun; in Romang, Serua, Dama, Keisar, Leti Moa Lakor, Babar, and Luang-Sermata, in all of which islands the sun-lord is called *Upu-lero;* and in Timorlaut, where he is called *Ublera.* In each village of the Leti Moa Lakor, Babar and Luang-Sermata groups, an annual feast is held during which offerings are made to *Upu-lero,* who is supposed to descend for that purpose into an image which is placed on the top of the wooden pole which constitutes part of the stone offering-places described in chapter iv. In Timorlaut *Ublera* is supposed to descend, in order to receive offerings, into an image which is placed in the middle of each village: on uninhabited islands certain stones are used for the purpose.[1]

This survey shows that the "sun-cult" practised by the people of the Timor region is apparently not associated with the sun itself, but rather with a being who is supposed to live therein and to descend to the earth from time to time. This distinction between the sun and the being who inhabits it is clearly brought out in Wetar, where the "great lord of old" is said to live in the sun.

The sun-lord bears the same name in several islands of the Timor region, and the similarity of nomenclature extends to the words for the sun itself which are used by the peoples of these islands. This is shown by the table.

Flores (Sicca)[2]	lero.
Solor[3]	lera.
Savu	lodo.
Roti[4]	leda.
South-west Timor (Kupang)	laelo.
Central Timor	loro.
Serua	lero.
Wetar[5]	lelo.
Keisar[6]	leere, leri.
Leti Moa Lakor	lero.
Luang-Sermata	lero.
Babar	lero.

[1] Riedel (iv), 460, 436, 410, 372, 337, 312, 280; Zollinger (i), 128; ten Kate (i), 224; Riedel (v), 278; Jacobsen, 56; S. Muller, II, 273; Forbes, 444. [2] In those cases in this table where no reference is given the word has already appeared in this book. [3] Leekmer. He says that this language is used in Flores east of Sicca, Adunara, and in the west part of Lombok, as well as in Solor. [4] Kleian, 277. [5] Riedel (iv), 436. [6] Ibid., 410; Earle, 695 *et seq.*

Timorlaut	lera.
Aru [1]	lara, laor.
Kei [2]	leera, lehr.
Seran	lara.

I have not been able to discover that any variants of the word *lero*, as terms denoting the sun, have been recorded in any places in Indonesia other than those included in this table.

The close resemblance which exists between the various expressions which are used for the sun and the sun-lord in the Timor region suggests that these terms have been adopted as the result of one cultural influence in all these places. And the direct association between the sun-cult of the islands east of Timor and the stone offering-places which exist in those islands, suggests that these influences are those of stone-using immigrants.

The people of these islands assert that their sun-cult is alien in nature, for they say that strangers from the west introduced it to Luang-Sermata,[3] whence it spread to the neighbouring islands.[4] This traditional support enables us to conclude that the sun-cult of the Timor region is immigrant in origin. Other traditional evidence confirms the conjecture that the strangers were the stone-using immigrants. For the chiefs of south-west Timor call themselves "children of the sun".[5] In central Timor chiefs are called, so Riedel tells us, "great sun" or "son of the sun".[6] The chiefs of Sonabait, who once ruled Timor, are "children of the sun," and their ancestors are said to have been immigrants.[7] The chiefs of Amanubang owe their origin to an immigrant who possibly brought the sun-cult. It is said that a slave of Abineno, a chief of Hounieen in Amarassi (a district of south-west Timor just to the west of Amanubang) one night dreamed that he saw a flame on the head of a horse. He concluded that this was a sign of good luck, and thereupon stole the treasure and gold ornaments of his master and fled to the east to Amanubang, where he lit a fire on a height. When the inhabitants, who were very astonished to see the fire, came to

[1] Riedel (iv), 252; Eijbergen, 56. [2] Riedel (iv), 220; Eijbergen, 568. [3] S. Muller, op. cit. Comparative Table. Other words for the sun are used in this island. [4] v. Hoevell, 196; Bastian, II, 60. [5] Graamberg, 185; Bastian, II, 8; Cabaton, 356. [6] Riedel (vii). [7] Bastian, II, 9.

discover the cause of this phenomenon, they met the slave clothed with the costly gold and silver ornaments of his master all glistening in the sun, and, thinking that he was sent from heaven by *Usi-neno*, thereupon made him their chief.[1]

In chapter vi. it was claimed that stone-using immigrants have moved from west to east across the Timor region, and that these strangers founded lines of chiefs who, especially in the islands at the west end of the region, were placed after death in elaborate graves or in graves differing in size from those used for commoners. The evidence just quoted shows that the ancestors of certain of these chiefs were immigrants. These immigrants were, moreover, closely connected with the sun, for their descendants claim to be "children of the sun". The evidence therefore agrees in associating the sun-cult of the Timor region with the immigrants who introduced the use of stone.

We have already seen that the people of Sumba do not appear to possess a sun-cult. Yet the presence of solar symbols carved on stones that are associated with some of the dolmens in this island constitutes evidence that the immigrants who built the dolmens practised a sun-cult. Moreover, some of the dolmens are said to be the work of people from Flores, an island where the sun-cult exists. In Savu, another island where no sun-cult is reported, the two chief deities are *Pu-lodo-liru* and *Pu-lodo-rae*. Wilken says: "The surmise that the worship of *Pu-lodo-liru* and *Pu-lodo-rae* has originated in a former sun-cult is certainly not hazardous. There can be only one opinion as to the names of these two deities. *Pu* means lord, *liru* means 'heaven' or firmament, and *rae* means the earth. The expression *Pu-lodo* can be translated 'the sun-lord,' and must originally have been used without the addition of the words *liru* and *rae* in the time when men worshipped the visible heavenly bodies."[2] But, although traces of the sun-cult exist in Sumba and Savu, no evidence can be put forward to show that the sun-cult is, or ever has been, present in the Belu district of Timor. These people differ in another respect from the other peoples of the Timor region, for they say that their ancestors came from the north, a direction different from that of the main movement of stone-using people in the Timor region.[3] So, although the evidence

[1] Bastian, II, 10-11, 66. [2] III, 179. [3] Gryzen.

agrees in ascribing the existence of the sun-cult in the Timor region to the influence of the stone-using immigrants, it will be necessary to account for its apparent absence in three places where much use is made of stone.

The accounts of the beliefs and practices associated with the sun that have been recorded among the peoples of the rest of Indonesia reveal no signs anywhere of a cult so definite and important as that which exists in the Timor region.

A sun-cult is reported in the Aru, Kei, and Watubela groups. v. Hoevell states that in the Aru group the cult differs from those of the Timor region.[1] It is indefinite in nature, and Schmidt is of the opinion that it has been introduced from elsewhere. In the Watubela group the sun-lord is called *Tata-lat*, "grandfather chief sun".

In the Kei Islands, a man who wishes to take a very serious oath says, "Lord of the sun and moon, the holy one of the *ursiwa* and *urlima*, the sacred one of all who are dead, consider my affair, if I am guilty let me die".[2] It was concluded earlier that the founders of these brotherhoods introduced the use of stone to certain islands in this region. The prayer just quoted suggests that, since these brotherhoods are so closely associated with a sun-lord, their founders brought with them a sun-cult.

No beliefs and practices connected with a being who lives in the sun are reported in Ambon, Seran, or Buru, with the exception of the belief which is held in Seran that *Upu lanite*, the "lord of the sky," lives in the sun;[3] so it would appear that the indigenous peoples of these islands have not developed a cult of the sun. The conclusion that the sun-cult of the region under consideration was introduced by the founders of the brotherhoods would account satisfactorily for the condition of things in Seran and Buru, for the brotherhoods are not present in Buru, and their influence is weak in Seran. It would not, however, account for the absence of beliefs in a sun-lord in Ambon, an island where much use is made of stone. This constitutes a difficulty similar to those encountered in the cases of Sumba, Savu, and the Belu district of Timor.

In Halmahera a being called *Djou wongi* is believed to live

[1] Riedel (iv), 252, 220, 195; v. Hoevell, 125. [2] Riedel (iv), 225. [3] Riedel (iv).

in the sun.[1] Beyer, who states that the sun and moon are held to be great beings, or the habitations of such, by the peoples of the Philippines, mentions a sun-cult among the Manobo of Mindanao and the Igorot of Luzon.[2]

Several of the sky beings whose doings are recorded in the Tontemboan tales are "sun-lords". One of them, To'ar, married his mother, Lumimu'ut, the "ancestress" of the Tontemboan, who came out of a stone. Another sun-lord, Si Marendor, the son of Lumimu'ut and To'ar, married their daughter Lintjambene. Lintjambene also married her son Muntu'untu, who is a sun-lord.[3]

Si Marendor, the son of Lumimu'ut and To'ar, who marries his sister Lintjambene, is said to be half stone and half sky-born. He is supposed to be the same person as Kerito, another sun-lord, who is half human and half stone. This identification suggests that the stone part of Kerito is equivalent to the sky-born part of Marendor. The validity of this equation is confirmed by the tale of Lintjambene, who, wandering about the earth, saw the head of the "god-man" Maror which was half flesh and half stone.[4] Thus these people seem to believe that there is a close relationship between stone and the sky-world.

The facts suggest that the sky-beings of the Tontemboan are closely connected with the influence of the stone-using immigrants. For Lumimu'ut, who came out of a stone, married a sun-lord, and their daughter married two husbands, one of whom was a sun-lord and the other was half flesh and half stone.

The existence among the Tontemboan of the belief that their ancestress came out of a stone was accounted for in chapter x. as being the result of a migration after the use of stone had been acquired from the immigrants. This conclusion is supported by the assertion made by the Tontemboan, that Lumimu'ut came to Minahassa from over the sea in a ship. Lumimu'ut, as has already been stated, married a sun-lord, and their daughter Lintjambene is also said to have reached Minahassa in a ship.[5] This would make some of the stone-using immigrants "children of the sun," and, as Lumimu'ut is said to have been the "ancestress" of the Tontemboan, it would be

[1] (iii), 66. [2] (ii), 90; Cole (ii), 172, 193. [3] Schwarz (i), 240 *et seq.*; Kruijt (iii), 470-1. [4] Bastian. [5] Schwarz (i), II, 97.

expected that some of this people imagine themselves to be descended from sun-lords, or at least from people of the sky-world. But no evidence has yet been adduced to lead us to conclude that such a class exists.

The sun-lords of the Tontemboan are the sons, real or imaginary, of women who are said to have migrated into Minahassa: To'ar is the son of Lumimu'ut; Si Marendor is the son of Lumimu'ut and To'ar, and Muntu'untu is the son of Lintjambene. It appears from this that the chief beings of the sky-world of the Tontemboan are looked upon as immigrants to Minahassa or their descendants.

It has already been stated that the stone-using immigrant who came among the Posso-Todjo Toradja was Lasaeo "the sun-lord". A belief recorded among these people states that the sun is the eye of Pue mPalaburu, who dwells in the places where it rises and sets.[1]

The Kayan of Sarawak say that "in the beginning there was a rock. On this the rain fell and gave rise to moss, and the worms aided by the dung beetles, made soil by their castings. Then a sword-handle (*haup malat*) came down from the sun and became a large tree. From the moon came a creeper which hanging from the tree became mated with it through the action of the wind." From this union the first men were produced.[2] Bastian states that the people on the Sambas river in Borneo worship the sun-lord Pangatu.[3]

In Nias a being named Lature, who is supposed to live in the sun, is believed to have the lives of all men in his hands.[4]

No sun-cult is reported among the Khasi of Assam. The Mao Naga consider the sun to be a benignant being, but the Quoireng Naga look upon him as malevolent.

Certain tales concerning the sun are recorded in Assam.

The Kabui Naga say that a man named Neumu sent his children into the jungle because they were leprous. These children one day tried to catch a snake which, although it lost its tail, escaped into a tree, whence it emerged with this organ restored. They noticed this, and ate some of the bark themselves,

[1] Kruijt and Adriani, I, 269 *et seq.*, 109. [2] Hose and McDougall, II, 137. [3] (iv). [4] Kramer, 478; Rappard, 575.

and were cured. They then went home with some of this bark which they placed in a secret place in the house. The bark was stolen one day by the sun while it was drying out of doors. Neumu's dog tracked the thief and devoured him because he would not surrender the booty.[1]

In a variant of this tale which has been recorded among the Kohlen clan of the Old Kuki of Manipur, seven brothers, who were cutting firewood, shot a deer, which they placed in some leaves at the bottom of a tree ready to be cooked by their youngest brother. After cooking it he placed it under some leaves. While he was away the leaves brought it to life again and it ran away. The other brothers returned and were so angry to find that the deer had disappeared that they killed their unfortunate brother. Some leaves fell on him and restored him to life. The brothers thereupon took some of the leaves with them. On their way home they put some of them on a dead dog which they saw floating down the river, and thus restored it to life. When they reached home they put the leaves in the sun to dry and left the dog to watch them. The sun and moon, seeing that they were useful, stole them, and were chased by the dog. This chase is now proceeding. When the dog gets near to the sun and moon they hide, and thus cause eclipses.

In another version the Kohlen say that a sky-being named Rikimpu one day left his dog to watch his garden. When the sun and moon came to steal things out of the garden the dog chased them.

The Anal clan of the Old Kuki say that once a very pious man had a dog. The sun and moon, being envious of him, wished to take away his "virtue". They offered to exchange and he did so, whereupon the dog chased them.[2]

These tales have not, so far as I am aware, been recorded elsewhere in Indonesia. Their similarities suggest borrowing.

There is no definite evidence for the existence of practices and beliefs concerning a sun-lord among the Garo, except that, in a story of creation, the sun and moon were made by a female being at the orders of the creator *Tatara-rabuga:* but in another

[1] Hodson, 129, 138, 169, 170, 175. [2] Shakespear (i), 183-4.

account the sun and moon are brother and sister, the children of *Asima-dingsima*.[1]

The Yahao branch of the Chin say that the ancestors were hatched out of an egg laid by the sun on Webula hill.[2]

The evidence at our disposal has shown that the immigrants who introduced the use of stone to certain parts of Indonesia brought with them a "sun-cult". This cult is apparently not associated directly with the sun, but with a being who, in certain islands of the Timor region and elsewhere, bears a name which, as Wilken shows, may best be translated as "sun-lord" and not "sun-god". The stone-using immigrants to Timor, Minahassa, and central Celebes (or some of them), were "sun-lords," and their chiefly descendants in Timor call themselves "children of the sun".

The elevation to the rank of supreme beings of Lumawig of the Bontoc (of Luzon) and the ancestor of the chiefs of Makale, in the Sadang district of central Celebes, suggests that the sun-lords of peoples ruled over by "children of the sun" are the immigrant ancestors of these chiefs. The supreme being in Wetar, "the great lord of old" who lives in the sun, seems to be some such person. But certain facts make it probable that so simple an explanation will not suffice. For sun-cults are reported in the east end of the Timor region, where no "children of the sun" are present, so far as we know: and the Posso-Todjo Toradja of central Celebes also believe in a sun-lord with whom a cult is associated, although this cult is very slightly developed. It must be remembered, however, that Lasaeo, the traditional stone-using immigrant among these people, was a sun-lord. A sun-cult can therefore exist in places where no chiefly class of "children of the sun" is reported to exist.

In places where the chiefs claim descent from the supreme being who lives in a world in the sky, there exists a remarkable state of affairs. For, although the sky-world may be a place apart from the earth, and the inhabitants thereof may be remote from the commoners, yet the chiefs believe that the closest ties of relationship exist between them and the celestial beings. A direct connection exists, as it were, between the earth and the

[1] Playfair, 82, 83, 85. [2] Scott, 458.

sky. But among peoples such as the Bontoc and the Posso-Todjo Toradja, who have no hereditary chiefs who claim descent from beings of the sky-world, the connection between the earth and the sky is apparently severed, leaving the two worlds separate.

CHAPTER XII.

INCESTUOUS UNIONS.

THE sky-beings of the Tontemboan of Minahassa contract incestuous unions: To'ar is the son and husband of Lumimu'ut; Muntu'untu is the son and husband of Lintjambene, who also married her brother Marendor. The frequency of such unions suggests that the sky-people are supposed to practise them regularly. I propose in this chapter to inquire why these beings should be credited with this custom, and shall put together all the evidence concerning incestuous unions that I have been able to collect.

In Savu it is said that the race sprang from the union of a brother and sister.[1] The tale of the origin of the Patumera clan of the Luang-Sermata group, in which a man is born from a stone, states that this man married his foster-sister.

In a tale recorded among the Bontoc of Luzon it is said that the land about Bontoc was once covered with water. Lumawig saw two young people, Fatanga and his sister Fukan, the survivors of the flood, who were left upon the top of a mountain. They were without fire, so Lumawig told them to wait while he went to Mt. Kalowitan to get some. When he returned Fukan was pregnant. Soon after a child had been born, Fatanga and Fukan went to Bontoc and became the ancestors of the people there.[2]

Another version given by Beyer is more explicit. Lumawig, seeing a man and a woman on the top of Mt. Pokis, got fire with which to warm them. He said to them, "You must marry, you brother and sister". The man said that it was possible but abominable, because they were brother and sister. However,

[1] Wilken, I, 459. [2] Jenks, 201.

they did as Lumawig told them, and became the ancestors of the Bontoc people.

The Igorot have another version. A flood once occurred, and a brother and sister were the only people left, the man in a cave on a mountain, and the woman on the top of the same mountain. One night, when the waters had subsided a little, the man came out of the cave and saw a fire on the top of the mountain. He was too terrified to go to the fire during the night, but in the morning he hurried up there and found his sister, who received him with open arms. They were the ancestors of the Igorot.

The Ifugao have an origin myth of a similar kind. Kagabit, the first son of Wigan, came from the sky-world to live on the earth. He built himself a house, and after a time Wigan sent Kagabit's sister, Bugan, to live with him. She accordingly came down and lodged in the top part of the house. Kagabit, seeing that the fowls procreated their kind, resolved to have intercourse with his sister, and did so in the night. After some time Bugan perceived that she was pregnant, which made her so melancholy that she ran away. She intended to take her life; but, seeing her brother following her, cast herself into the sea. Instead of going to the bottom of the sea, Bugan stopped at the rice granary of Ngilin Mangongol. Kagabit, following after, found her there and tried to soothe her. They decided to ask the opinion of Ngilin, who comforted her and told her to ask the opinion of his elder brother Ambumabbakai. When the latter was asked, he laughed loudly, and said, "Peradventure have ye not done well and righteously, there not being in existence any others but yourselves to procreate". However, Bugan and Kagabit asked the opinion of Muntalog, Ngilin's father, who approved of their conduct. Kagabit stayed three days with Muntalog, and at the end of this time he wished to return to the earth. Muntalog said, "Wait one day more until I go to see my father". Muntalog set out, and when he arrived he found his father and mother sitting facing each other. Muntalog said that he had come to ask for fire for the Ifugao. "My son," his father replied, "those Ifugao of yours could not reach Mumbonang without danger of being burned to cinders." Bugan and Kagabit journeyed to Othobon, where they had two children, a boy and a

girl. When the latter grew up they married and were the ancestors of the Silipanes.

The Ifugao have another myth of a flood, the only two survivors of which were Wigan and Bugan, brother and sister, who were stranded, Wigan upon Mt. Amuyao and Bugan on Mt. Kalautian. Wigan had no fire, but Bugan lit one; which showed Wigan that some one else was alive upon the earth. When the flood subsided, Wigan went to Mt. Kalautian and found Bugan. The two went to the valley in which the Banausoai clan live now and made a house, in the top part of which Bugan lived. Wigan found that they were the only people left alive on the earth, and that it must be repeopled by them. When Bugan found that she was pregnant she ran away. After she had gone a long way she lay down by the side of a river, but was surprised, on looking up, to see an old man with a long white beard sitting upon a rock. He said that he was Maknongan, and that she was not to worry. While they were talking Wigan arrived, and Maknongan gave the young people his blessing, saying that they had done right and that the world would be repeopled through them.

One version of the Toradja myth of origin states that the first pair of human beings descended from the sky at Wotu, a place on the Gulf of Boni. After a daughter had been born the couple quarrelled and separated. The woman later on wanted the man, and after some searching, found him. They then lived together and had a son. When the two children grew up the parents thought of marrying them, but dared not, since they were brother and sister. However, a messenger arrived from Pue mPalaburu, the sun-lord, to say that they might wed, and that two animals, a pig and a fowl, were to be sacrificed on account of the incest. Another version of the myth of origin states that a flood took place, and afterwards only a pregnant woman was left. She bore a son who became her husband.[1]

The people of south Nias derive their origin from the incestuous union either of a brother and sister or of a mother and son.[2]

The Naga of Maram say that once a great flood destroyed all mankind except a couple called Medungasi and Simoting. Finding themselves alone they did not know if they might marry;

[1] Beyer (ii), 94 *et seq.*; Kruijt and Adriani, I, 3. [2] Wilken, I, 459.

so they went into the jungle, and something befell them there which showed that they might not do so, for their union would be incestuous. However, they dreamed during the night that the "gods" said that they might marry provided they and their descendants did not eat pork.[1]

The Thado version of the origin of the Vuite clan of the Lushai is that Dongal, Thado's elder brother, had intercourse with his sister. A child was born, and the sister was so ashamed that she put it in a hollow tree, thinking that it would die. But when she saw after several days that it was still alive, she produced it. She said in explanation that she had discovered two eggs, and on tasting one had found it bitter; the other she had put into the rice-bin, where the sun's rays had hatched it out. Hence the child was called *Gwite*, from *ni-gwi*, the Thado word for a ray of sunshine.[2]

This survey has shown that several stone-using peoples claim to have originated from an incestuous union.

In the tenth chapter it was said that the stone-using peoples of Indonesia can be divided into three groups. In the first were placed people such as the Posso-Todjo Toradja, who have had slight intercourse with the stone-using immigrants, but have not a class of hereditary chiefs. These people say that their ancestors were made by the sky-people in the form of stone images. The second group comprises peoples, such as the Tangkhul Naga, who use stone to a considerable extent, have no hereditary chiefs, and claim to have migrated after acquiring the use of stone. The ancestors of these people are said to have emerged from split stones. The third class includes people, such as the Bontoc, who have acquired a considerable use of stone, but among whom the immigrants have not left a class of chiefs. These peoples do not claim to have migrated after acquiring the use of stone, and they have no myth of origin from stones. This myth of origin is also lacking among peoples such as those of south Nias who have a class of chiefs.

[1] Hodson, 13. [2] Shakespear (i), 142.

	Burst Stone.	Stone Image.	Incestuous Union.	Incestuous Union after Flood.
Savu			+	
Luang-Sermata	+		+	
Ifugao				+
Igorot				+
Bontoc				+
Formosa	+			
Tontemboan	+		+	
Posso-Todjo Toradja		+		+
Bada-Besoa Napu				
Nias			+	
Khasi Chiefs originated from a rock				
Maram				+
Tangkhul	+			
Kabui	+			
Vuite			+	

The table shows that the myth of origin from an incestuous union is found among peoples belonging to all three classes. But it is not reported among the Khasi and the Tangkhul and Kabui Naga. The Tangkhul and Kabui Naga differ from the other Naga tribes in that they claim that their ancestors came out of a split stone. The evidence cited in the tenth chapter suggests that such a form of origin myth is possessed by peoples who have migrated after acquiring the use of stone. Another of the Naga tribes, the Mao, who have no tradition that they migrated after acquiring the use of stone, say that their ancestors contracted an incestuous union. It is highly probable that all the Naga tribes have acquired the use of stone from similar sources. If we assume that the myth of origin from an incestuous union is due to the influence of the stone-using immigrants, the difference between the origin myths of the Tangkhul and Kabui Naga on the one hand, and the Mao on the other, would perhaps be due to the fact that the two former tribes have, as an effect of migration, replaced the myth of origin from an incestuous union, which they would formerly have possessed, by that from a split stone. Such an explanation would account also for the lack of such a claim on the part of the Khasi. For the ancestresses of some of the chiefs of that people are said to have come out of a rock, which suggests that they migrated among the Khasi after acquiring the use of stone.

But such an explanation is not satisfactory, for the Patumera clan of the Luang-Sermata group claim to have sprung from the incestuous union between a man who came out of a stone and his foster-sister. And Lumimu'ut, the ancestress of the Tontemboan of Minahassa, who came out of a split stone, contracted an incestuous union with To'ar her son. In both these cases there is reason for supposing that the use of stone was introduced by people who had migrated after acquiring it. It is therefore evident that the myth of origin is not always dropped as the result of the migrations of peoples who have acquired the use of stone from the immigrants.

There is a difference between the cultures of the Khasi and the Tangkhul and Kabui Naga, on the one hand, and those of the Patumera and Tontemboan on the other. No sun-cult is reported among the former peoples. On the other hand, it is present in Luang-Sermata and among the Tontemboan. This suggests that the myth of origin from an incestuous union is intimately bound up with the sun-cult.

The peoples who claim to have originated from an incestuous union may be divided into two groups: those who state that their ancestors were brother and sister, or mother and son, who married; and those who state that their ancestors were the survivors of a flood who were permitted by sky-beings to contract an incestuous union in order to perpetuate the race.

These two groups are constituted as follows:—

Savu	Luang-Sermata
South Nias	Bontoc
Vuite	Igorot
	Ifugao
	Tontemboan
	Posso-Todjo Toradja
	Mao Naga

In the second group of tales some of the beings who give permission for the survivors to marry are already known to us. Lumawig is the traditional introducer of the use of stone among the Bontoc. The tale which the Bontoc recount concerning their origin is so similar in its main details to those of the Igorot and Ifugao that it is legitimate to conclude that these tales have originated in similar circumstances. If that be so, the sky-beings

who give permission for the unions will also probably stand to the Igorot and Ifugao in a relationship similar to that which exists between the Bontoc and Lumawig. That is to say, they will be connected in some way with the stone-using immigrants among these peoples.

Pue mPalaburu, the sky-being who gives permission for the ancestors of the Posso-Todjo Toradja to marry, is also said to have made the first man out of stone. He is therefore, according to the conclusions arrived at in chapter x., closely connected with the stone-using immigrants.

The importance which is attached in all these tales to the permission which is given by the sky-beings for the ancestors to marry suggests that an intimate relationship exists between the sky-people and such unions. And since the sky-beings who give permission for such unions are, in some cases, associated with the stone-using immigrants, it would follow that the stone-using immigrants are in some way responsible for the introduction of such tales.

The other group of peoples, those who claim to have originated from incestuous unions which did not require the permission of sky-beings, are those who have hereditary chiefs. That is to say, they are people who are supposed to be directly associated with the influence of the stone-using immigrants. Since such communities consist of two classes at least, chiefs and commoners, it is a matter of some importance to determine which class claims to be descended from incestuous unions. Two facts suggest that this form of origin is that of the chiefs. In the case of the Vuite this claim is made explicitly. And the myth of origin from an incestuous union is found only in south Nias, where the influence of the stone-using immigrants has been strongest.

Why should chiefs say that they are descended from incestuous unions? The evidence afforded by the Tontemboan tales provides an answer. Lumimu'ut, the ancestress of the Tontemboan, and her daughter, Lintjambene, are both said to have come to Minahassa in a ship. Lintjambene is the daughter of To'ar the sun, and is thus a "child of the sun". Lintjambene herself contracts incestuous unions. So, if we accept the tradition that Lintjambene was a historical personage who migrated into Mina-

hassa, it would follow that some of the stone-using immigrants among the Tontemboan were "children of the sun" who contracted incestuous unions. This suggests that such unions were entered upon by the stone-using immigrants, and, consequently, that the claim to have originated from such a form of marriage is based upon fact.

The results obtained from the consideration of the data adduced in this chapter form a consistent whole. It would seem that the stone-using immigrants, who are remembered in the form of sky-beings and sun-lords, practised incestuous marriages. Those classes the members of which are, it has been concluded, descended from these immigrants, say that their ancestors contracted incestuous unions; and if they are so descended, this claim would seem to be literally true. Those stone-using people who, so far as has been determined, have no chiefly class, but who possess a sun-cult, also claim an origin from an incestuous union. But their stories differ from those just mentioned in that it is said that permission to marry is given to the survivors of a flood who are blood relatives.

The claim to have originated from an incestuous union is apparently put forward only by people who have a sky-descended class of chiefs, or who possess a sun-cult. Other peoples, stone-using or otherwise, do not make such a claim. The circumstances in which this claim occurs are therefore such as to enable us to ascribe it to the influence of the stone-using immigrants.

The two groups of tales examined in this chapter present the stone-using immigrants under two different aspects. Among people with hereditary chiefs these immigrants are ancestors who contracted incestuous unions. As these immigrants are remembered as beings connected with the world in the sky, it thus follows that an intimate relationship between the earth and the sky exists in such places. The sky-beings apparently stand in a different relationship to those people who have no hereditary chiefs. No longer are they ancestors of chiefs who contracted incestuous unions, but they are sky-beings who give permission for the survivors of a flood to perpetuate their race by such an union. In these cases the connecting-link between the earth and the sky which is provided by a sky-born chieftainship is severed, leaving the two worlds apparently distinct.

The evidence put forward in this chapter combines with that adduced in the chapter on stone origin myths to show that, whatever the manner in which the stone-using immigrants have influenced the cultures of the indigenous peoples of Indonesia who have adopted the use of stone, these peoples date their origin or creation from times subsequent to the arrival of the strangers among them. In addition the stone-using immigrants have supplied, in certain cases, supreme beings who live in the sky-world. The arrival of the stone-using immigrants seems therefore to have marked the beginning of a new era in Indonesian history.

CHAPTER XIII.

FERTILITY.

THE accounts which the Tontemboan give of their origin agree with those of the Tangkhul and Kabui Naga in stating that their ancestors came out of a stone, but they differ from those of the latter in assigning a cause for the emergence. In one tale of the Tontemboan a youth, who is produced by the action of the sun upon foam, discovers his future wife as a small girl who has just emerged from a stone to which she is attached by her navel-string. This girl is said to have been born as the result either of the action of the sun's rays upon the stone, or from the rubbing together of two stones. In this story the sun is looked upon as a fertilising agency. The Tangkhul and Kabui Naga, on the other hand, simply state that their ancestors came out of a stone. These latter peoples differ from the Tontemboan in that they do not possess a "sun-cult". It is therefore possible that the belief that the sun is a fertilising agent forms part of the sun-cult which the stone-using immigrants have introduced to Indonesia. I propose to follow up this clue and to inquire whether this function is ascribed to the sun elsewhere.

The following accounts of the relationship between the sun and the earth have been recorded in the Timor region.

The sun is male in south-west Timor and is called *Usi-neno*. The earth is *Usi-afu*. The sun fertilises everything, and from its conjunction with the earth all things living have come. The moon, *funan*, is also a wife of *Usi-neno*.[1] In Wetar, *Paibei wawaki* or *wawahaki*, the "great lord" or "great elder," lives in the sun. He is the "male principle,"[2] and *Rae* or *Raa* the earth, is the "female principle". The supreme being in

[1] S. Muller, II, 261; Graamberg, 206-7. [2] I am quoting the expressions used by other writers.

Keisar is *Makarom-Manuwe*, who lives in the sun. He is the "male principle," and the "female principle" is *Makarom-Mawaku* (= stone) who is identified with *Noho Makarom*, the guardian spirit of the island, *Wor Makarom*, the guardian spirit of the mountain, and *Nunu Makarom*, the guardian spirit of the banyan tree. By means of the banyan tree, *Makarom-Manuwe*, who is also called *Opo-lere*, fertilises *Makarom-Mawaku* at the end of the east monsoon. In Leti Moa and Lakor *Upu-lero*, the sun, is the "male," and *Upu-nusu*, the earth, is the "female principle". In the east monsoon *Upu-lero* descends into the banyan tree and fructifies *Upu-nusu*. Formerly at this time the men and women of the islands had promiscuous sexual intercourse for a month. In the Luang-Sermata group *Upu-lero*, the "male principle," fructifies *Lea*, the earth, descending into the image, *aiterhe*, for the purpose. The same happens in the Babar Islands, where *Upu-lero* is the sun-lord, and *Raiawa* or *Upu lero wate* is the earth. In Roma, Dama, and neighbouring islands, the sun-lord is *Upu-lero:* he comes to the earth periodically to fructify it. The sun-lord comes to fructify the earth in the Timorlaut Islands.

The people of the Aru Islands worship *Dyabu*, the sun, as the "male principle," and *Dyabu fafa*, the earth, as the "female principle," the former fructifying the latter at the beginning of the west monsoon. *Dyabu fulan*, the moon, is also male. In the Kei Islands *Duadleera wuan* or *Duang leerwuan* is the supreme being who lives in the sun or in the sky. The sun, as the "male principle," fructifies the moon at the first quarter and the earth at the monsoon. In the Watubela Islands *Tata-lat*, "grandfather chief sun," is worshipped as the male principle, and *Latu hila la balaa* or *Latu bumu*, "chieftess earth," as the "female principle".

The people of Ambon believe in *Upu lanito*, the sky-lord, and *Ina ume*, mother earth. In Seran *Upu lanite*, the sky-lord, is the male element, while *Rapie* or *Upu tapene*, the female element, lives in the earth. In Buru a being *Opo langi* is supposed to live in the sky and a female being *Ubun sanane* to live in the earth, but no abstract conceptions concerning these beings appear to exist in this island.[1]

[1] Riedel (iv), 436, 410, 372, 337, 314, 280, 252, 220, 195, 106, 54, 7.

This survey shows that in the Timor region, from Timor to Timorlaut, the sun-lord is supposed to fructify the earth. The beliefs which the peoples hold concerning the fertilising function are so similar in the various islands that to record them in detail involves a repetition of the same phrases with different names. The conception that the sun is the cause of fertility on the earth thus appears to be an integral part of the sun-cult, occurring as it does with such regularity throughout a region where the influence of the stone-using immigrants has been so similar in nature. The apparent absence of any such idea in Buru where no sun-cult is recorded, constitutes negative evidence in favour of this conclusion, for it tends to show that the indigenous peoples have not of themselves elaborated any such conception. Moreover, the fertilising agent is not the sun, but the sun-lord, who fructifies, not the earth, but a being who is called the earth-mother or some such name. The conception is therefore attached to beings, real or imaginary, of immigrant origin.

The statement that the sun is the "male principle" and the earth is the "female principle" is difficult to understand. If we accept the conclusion that the sun-lords of places such as south-west Timor are not speculative beings, but are the ancestors, real or supposed, of the reigning chiefs, the designation of "male principle" sounds strange. It seems as if a philosophical conception has become applied to beings who are the personifications of the sun. The available evidence is not, however, sufficient to enable us to discuss this matter.

The idea that the sun or its personification fructifies the earth or its personification, is not recorded elsewhere in Indonesia, so far as I have been able to discover, except among the Mao Naga, who state that the conjugal embrace of the sun and earth causes all the fertility of the latter.[1]

In the chapter on the beliefs concerning the sun, it was found that a definite cult was associated with the sun-lord throughout the Timor region only, and not in other parts of Indonesia. The similar distribution of the belief that the fertility of the earth is caused by the union of the sun and earth therefore constitutes evidence that this belief is part of the sun-cult introduced by the stone-using immigrants.

[1] Hodson, 127.

Other evidence suggests that the stone-using immigrants have introduced sexual symbolism to Indonesia.

In Sumba human figures, male and female, with huge genitalia, are carved upon the menhirs at the head and foot of dolmen graves which ten Kate says are those of the chiefs of Mendjeli. Two horses, of fantastic shape, with large genitalia, are carved on a dolmen at Landuwitu-Ratimbera. Two human figures carved on the vertical stone of the largest grave at Lawiri-Ladesa have outstretched limbs and the "never-failing very conspicuous genitalia of both sexes".[1]

The image into which *Upu-lero* descends, in the Leti Moa Lakor and Babar groups, to receive offerings, consists of a head placed upon a wooden post. Beneath the image is a wooden representation of a phallus.[2] Riedel gives a representation of an offering-place on Dawaloor, which consists of two phalli standing up from a rectangular stone structure. The representation which he gives of the grave of Kikilailai, a former stone-using immigrant, in Keisar, shows an image sitting at the foot of a post, and on either side of the image is a wooden phallus. Some wooden posts, apparently reproductions of phalli, stick out of the rectangular stone structure on the grave of Maukai, one of the followers of Kikilailai in Keisar. Riedel has published pictures of images in Timorlaut that are provided with large genitalia.[3] Van Schmidt states that every village in Ambon keeps a sacred image, either in the forest or in a cave. He mentions one called *Butu-ulisiwa* (the phallus of the Ulisiwa), which is especially worshipped by the Ulisiwa.[4]

I have not been able to find any mention of phallic ornamentation in Minahassa.[5]

The Toradja peoples make use of phallic ornamentation. Two figures, male and female, with huge genitalia, are carved upon the chief post of the temple of the Posso-Todjo village of Tando mBeaga. In the temples of villages of any importance female breasts and genital organs are carved upon the central posts. Part of the ornamentation in the temple of Langga-dopi

[1] Ten Kate (i), 583, 609. [2] Riedel (iv), Plates 33, 35. [3] (1) (iv), Plates 32, 38, 27. [4] Horst, 93. [5] Except that, on the cover of the first part of the 1898 edition of Graafland's Minahassa, a stone urn is reproduced on which are carved human and animal figures with well-marked genitalia.

consists of genital organs in the position of coitus. Among the mountain groups ten Kate saw mammæ and genital organs carved upon the temples at Bomba, and Bariri in Besoa.[1] Grubauer states that the temples of the To Leboni have mammæ carved upon the side walls. In the temple at Leboni there are two figures to the right and left of the centre post. These life-size figures, which represent Tangilando and Bambawalo, two "ancestors" (but of whom we are not told), are provided with huge genital organs. Grubauer saw two human figures with large genital organs at the entrance to the village temple at Tedeboi in Rampi.[2] Phallic ornamentation is also found in the Sadang district.[3]

The Bahau of Borneo, to whom belong the Kayan, have phallic ornamentation. Nieuwenhuis states that they make representations of human figures with large genitalia, which latter are also carved upon planks and elsewhere to frighten away evil spirits. In another place he tells us that the Bahau and Kenyah assign particular importance to the use of the genital organs for ornamentation, this being partly due to the fact that a great degree of safety is thereby thought to be procured. The Bahau on the Mahakam often carve figures, human and grotesque, with immense genitalia, especially upon the planks leading from the landing-stage to the house.[4]

Phallic ornamentation exists in Nias.[5] The houses of chiefs in the east part of the island are ornamented with mammæ and phalli. In this district the possession of large dishes shaped like mammæ, in which women dance, is a mark of nobility. Many of the images made in the north, south, and east parts of this island have large genitalia. In a special house made for the purpose at Onolumba, a small village in the Lahomi district of west Nias, there are two wooden figures which represent a man and woman in the act of coitus. Images are provided with genitalia only in two parts of west Nias.

The results of this survey of the phallic ornamentation of Indonesia are shown in the following table:—

[1] Kruijt and Adriani, I, 289; II, 467. [2] 370, 388. [3] Grubauer, 220. [4] (i), I, 166, 448; II, 251. [5] de Zwaan, 62 *et seq.*

	Village Temple.	Chief's House or Grave.	Village Offering-place.	Entrance to Village.	Ordinary House.
Sumba		+		+	
Keisar			+		
Leti Moa Lakor . .			+		
Babar			+		
Ambon . . .	(sacred phallic image associated with village).				
Minahassa . . .	(phallic ornamentation on stone urn).				
Posso-Todjo Toradja .	+				
Bada Toradja . .	+				
Leboni „ . .	+				
Rampi „ . .	+				
Luwu	+				
Bahau (Borneo) . .				+	
Nias				+	

This table shows that phallic ornamentation is found on village offering-places and temples, and at the entrance to villages. It is not generally associated with the houses of commoners.

The examination of the different forms of stone-work in Indonesia showed that the chief signs of the influence of the stone-using immigrants consisted of village offering-places, sacred stones attached to villages as the places of residence of the guardian spirits of the village, stone village walls, and stone substructures for village temples; that is to say, stone-work connected with the village rather than with ordinary houses. These associations are, generally speaking, similar to those of phallic ornamentation. Moreover, phallic ornamentation is applied to the ornamented graves of Sumba, which, as far as we know, are those of chiefs, the descendants, it has been concluded, of stone-using immigrants. Phallic ornamentation also occurs on the graves of stone-using immigrants into Keisar; and in Nias it is associated directly with chiefs, the descendants, it is supposed, of stone-using immigrants. The associations of phallic ornamentation are therefore such as to suggest that this form of decoration owes its presence in Indonesia to the stone-using immigrants.

In two places phallic ornamentation is used in the decoration of ordinary houses, but in both cases it is conventionalised. The Bahau of Borneo use it in connection with their long houses, which are really villages; but "in the houses these rough imitations are not to be seen; here the Dyak's innate sense of beauty has caused the original form to become conventionalised into

pleasing designs".[1] Fischer is of the opinion that some of the ornamentation of ordinary houses in Nias consists of conventionalised genitalia. Therefore indigenous peoples only appear to adopt phallic ornamentation in a conventionalised form.

There is also good reason to believe that along with this conventionalisation goes an indefiniteness with regard to its meaning and use. The people of Nias make images with genitalia. In the north part of the island the genital organs are supposed to frighten away evil spirits: in south and east Nias they are looked upon as a subject for mirth, the male organ being sometimes bent so as to cause laughter; in west Nias images with genital organs are only made in two districts, and no significance is attached to the genitalia even when they are made.[2] From this we gather that the people of Nias have no definite and uniform ideas with regard to the meaning of phallic ornamentation. The Toradja also regard it as a subject for humour.[3]

Phallic ornamentation is used so generally in connection with village temples and offering-places, and on images placed at the entrance to villages, that some precise meaning must have been attached to it by the stone-using immigrants. The association of phallic emblems in the Timor region with stone offering-places which are connected with a cult, part of which is concerned with fertility, suggests that they are symbols of fertility. Additional evidence in favour of this view is forthcoming from Ambon, where the images connected with the Ulisiwa are worshipped by women in order that they may be fertile.[4]

With this knowledge at our disposal it is now possible to consider one feature of the dissoliths of Nias and Minahassa which has been left unexplained—their sexual nature. The upright stone is said to be male and the horizontal stone female. Sometimes the upright stones of the dissoliths in Nias, which are erected in honour of chiefs, are shaped like a phallus. The Tontemboan of Minahassa hold a ceremony during which a priest makes three boys sit by the side of the dissolith. They place their hands on the stone and their heads flat against it, and call out a formula

[1] Nieuwenhuis (i), II, 251. [2] de Zwaan, loc. cit. He quotes Fischer's remark
[3] Kruijt and Adriani, I, 289. [4] Horst, loc. cit.

which they have learned, ending up with the terms for the male and female sexual organs.[1]

Dissoliths therefore appear to owe their sexual nature to the fact that the stone-using immigrants have brought a phallic cult with them to Indonesia.

[1] Schwarz (i), 187.

CHAPTER XIV.

THE LAND OF THE DEAD.

CERTAIN evidence adduced in previous chapters has revealed the belief in the existence of a world in the sky with which the stone-using immigrants are supposed to be intimately connected. In some cases the stone-using immigrants are said to have come from the sky and to have returned there; in others again, chiefs claim descent from beings of the sky-world. In a paper on "Myths of Origin and the Home of the Dead" I have put forward evidence to show that some Indonesian peoples believe that their ghosts go at death to certain places; for example, underground, or to the mountains: and that these people claim generally that their ancestors came from the same places; those who believe that their ancestors came out of the underground world imagine that their ghosts go there at death, and so on. If the thesis of this paper be true, it will follow that people, such as members of chiefly classes, who claim descent from denizens of the sky-world, will also look upon that place as their home after death. I propose to put this matter to the test, and to collect all the evidence concerning beliefs in the existence of a land of the dead in the sky which I have been able to find in the literature dealing with Indonesian peoples, so as to determine, as far as is possible, the exact relationship between the sky-world and those classes which have been supposed to owe their origin to the stone-using immigrants.

In south-west Timor commoners are interred, lying on their sides, facing the east, in which direction lies their land of origin. Their land of the dead is underground. The chiefs are interred lying on their backs so as to face towards the sun, which is their land of the dead and place of origin.[1]

[1] Bastian, II, 6, 8; S. Muller, II, 231, 259. I shall not discuss here all cases in which the thesis of the paper on "Myths of Origin" appears to be contradicted. I

The ghosts of the dead in Watubela are supposed usually to go to Teri, a mountain in east Seran, but the ghosts of warriors go to the moon.[1]

In Seran the *patasiwa talu waini*, the ghosts of members of the Kakian club of the Patasiwa, live temporarily in their clubhouse, and then, after a time, disappear into the sky. The ghosts of ordinary people live on Mt. Patujawanea and other mountains.[2]

The ghosts of chiefs in the Loda district of Halmahera are supposed to go to the sky after death.[3]

The Bontoc believe that the ghosts of a warrior whose head has been taken goes to the sky, and there has a head of flames. The ghosts of other people go to the mountains.[4]

In Minahassa the ghosts of notables and rich people are believed to go to Kasendukan, the sky-world, while the ghosts of the poor go to the forests.[5]

The chiefs in the Sadang district of the Toradja are said to go to the sky after death.[6]

De Zwaan states that the ghosts of chiefs in Nias go, according to belief, to the sky after death, while those of commoners go to the underground world.[7]

The Mao Naga at Jessami say that the "good" go to the sky at death and the "bad" go to the underground world.[8]

I propose to discuss these cases in turn. The chiefs of southwest Timor are, according to the available evidence, the descendants of stone-using immigrants. As "children of the sun," who claim descent from the sun-lord of the people over whom they rule, they form a class closely connected with the sky. We see now that they suppose that their ghosts return there at death. The commoners, on the other hand, who do not claim such a mode of descent, believe that their ghosts go into the underground world.

In Watubela the ghosts of warriors are believed to go to the moon, while those of commoners go to Seran. In several places in Indonesia warriors are distinguished from the rest of the com-

reserve the consideration of such apparent exceptions until the time when I shall be able to discuss the problem at length. [1] Riedel (iv), 211, 212. [2] Ibid., 144. [3] Kruijt (iii). [4] Jenks. [5] Wilken, III, 51. [6] Grubauer, 209, 232, 269. Possibly the ghosts of commoners go there also. [7] 237. [8] Hodson, 161.

munity by the use of a special form of stone grave, or by the erection of a stone memorial in their honour.[1] These marks of distinction owe their origin, it has been concluded, to the influence of the stone-using immigrants. We now find that warriors are further distinguished by being connected with a place with which the immigrants are intimately associated.

The Patasiwa of Seran have been discussed more than once. The situation of their offering-places was ascribed by the people of Seran to the fact that the founders of the brotherhood were immigrants. The Patasiwa use seats in their club-houses, while the Patalima sit on the ground. Both of these brotherhoods are connected with the sun-cult. The Ulusiwa of Ambon, who correspond to the Patasiwa of Seran, possess a phallic image. These facts all agree in indicating the founders of the Patasiwa as the introducers of the use of stone to Seran. The Patasiwa form a sort of nobility in the island.[2] We now learn that their ghosts are supposed to go to the sky, the place which is especially connected with the stone-using immigrants.

The chiefs of Loda in Halmahera are presumably the descendants of stone-using immigrants. It is therefore important to find that their ghosts are supposed to go to the sky after death.

Bontoc warriors whose heads have been taken are placed in a grave excavated in the side of a mountain. Warriors are also distinguished from the rest of the people in that they are associated with the *pabafunan*, the men's house, the origin of which is ascribed by the Bontoc to Lumawig, who is said to have introduced the custom of head-hunting. The fact that the ghosts of warriors go after death to the sky, the place whence Lumawig is supposed to have come, constitutes a further connecting-link between warriors and the stone-using immigrants. The ascription of a head of flames to the ghosts of slain warriors is remarkable, and it is still more noteworthy in view of the fact that the first head which was taken among the Bontoc is said to have been taken by the "children of the sun". This is further evidence of the close connection between head-hunting and the stone-using immigrants.

In Minahassa the Tontemboan state that the ghosts of notables and rich people are supposed to go to the sky-world,

[1] p. 44. [2] Horst; see also Riedel (iv).

while those of commoners are believed to go to the forest. This distinction verifies a conjecture made in chapter xi., where it was assumed that, since the Tontemboan claimed descent from Lumimu'ut, who married a sun-lord, part of this people would be descended from sky-people. No facts have warranted the conclusion that the Tontemboan possess a class of hereditary chiefs descended from stone-using immigrants; but we now see that these immigrants have, in all probability, given rise to an upper class, the members of which go to their ancestral home, the sky-world, whence the stone-using immigrants are supposed to have come.

The distinction between the upper and lower classes of the Tontemboan has probably arisen in the following manner. As already stated, the people of Minahassa are said to have placed their dead in trees in the times before the arrival of the stone-using immigrants. The latter have, we conclude, formed the upper class of the community, and their ghosts are supposed to join their ancestors in the sky-world. But the former, although they might adopt a different mode of disposal, would probably still consider that their ghosts go to join those of their ancestors, which would be in the forest, the ancient place of disposal.

The culture of the Toradja of the Sadang group who live between the Rantepao and Simbuang Mapak valleys shows definite signs of the influence of the stone-using immigrants; they place their dead in rock-cut tombs, they erect alignments, and they are ruled over by chiefs who claim descent from the sky-people, in one case from the supreme being. These sky-descended chiefs are supposed to go to the sky at death. It is not quite clear, however, from the statements of Grubauer, whether this privilege is confined to the chiefs, or whether it is shared by the commoners too. It will be necessary to await further information before this matter can be cleared up.

The Sadang group differ from the Posso-Todjo group, for the latter say that their land of the dead is underground, and that the entrance is in the west where the sun sets.[1] The stone-using immigrants have not founded a chiefly class among these people, and, correspondingly, no ghosts are supposed to go to the sky-world. The localisation of the land of the dead of these people presents a peculiar problem. For, although they claim that their

[1] Adriani (iii), 8, 9; (ii), 228.

ancestors came from the north, their ghosts are supposed to go to the west, thus forming an exception to the rule in Indonesia, which is that the direction of the land of the dead is that of the place of origin.[1] The Posso-Todjo group differ in this respect from the To Bada, among whom the orientation of houses and images is northward, in the direction of the land of origin.

It is possible to suggest an explanation of this exception. In the paper on "Myths of Origin" it was stated that, in general, the ghosts of the dead go back whence they came. The Posso-Todjo group is remarkable in that these people claim that the sky-beings created their first ancestors. In one version of their myth of origin, Pue mPalaburu, the sun-lord, is responsible for the act of creation. It is therefore possible that, in placing the land of the dead in the west, the Posso-Todjo Toradja believe that their ghosts return to their maker, who is supposed to live where the sun rises and sets.

The chiefs of Nias, who are distinguished from the commoners by their use of stone seats for ceremonial purposes, constitute a class the members of which are, according to the evidence already put forward, the descendants of stone-using immigrants. Their ghosts, we now find, are supposed to go at death to the sky, while the ghosts of commoners are supposed to go to the underground world.

The Mao are distinguished from the other Naga tribes, for they possess a sun-cult; they claim to be descended from an incestuous union, and they ascribe the fertility of the earth to the union of the sun and earth. These three cultural elements, which have been ascribed to the direct influence of the stone-using immigrants, are not reported among the other Naga tribes. The Mao also differ from the others in that they claim that the ghosts of the "good" go to the sky, while those of the "bad" go to the underground world, but they are unable to say what they mean by "good" and "bad". This indefiniteness is well in keeping with the vague nature of the influence which the stone-using immigrants have had upon the culture of this people.

The beliefs recorded in this chapter afford strong support for the conclusions already arrived at concerning the manner in which the stone-using immigrants have influenced the cultures

[1] Perry (i).

of the indigenous peoples of Indonesia. Those classes which were supposed in earlier chapters to have been marked off, as the result of the influence of the stone-using immigrants, from the rest of the community, are now seen to be intimately connected with the sky-world, whence the immigrants are supposed to have come. In each place where the strangers have founded a line of chiefs or a nobility, there is therefore a bisection of the community of a fundamental character. Two classes with entirely distinct associations are living together, and their severance at death is complete. After death chiefs do not rule over their subjects, but join their ancestors in the sky; while the commoners go to their ancestral home, which is supposed to be underground, or in the forest, or on the mountains.

The sky-world is evidently a place with which the indigenous populations have nothing whatever to do, for in no case do they claim that they go there at death or that they are descended from its denizens. It is peopled, so far as it is possible to tell, by beings such as Lasaeo and his chiefly descendants, the supreme being of the Toradja of Makale and his chiefly descendants, Lumawig, sun-lords who are the supposed ancestors of lines of chiefs, the immigrant children of the sun into Minahassa, and the ghosts of upper classes and of warriors. It is possible that, in certain places such as Minahassa, some of the beings who inhabit this world are entirely fictitious, the product of speculation. Some of the sun-lords of the Tontemboan are said to be "personifications" of various phases of the sun. But the fact that these sun-lords are looked upon as the descendants of Lumimu'ut, who is regarded as a historical personage, goes to show that such beings are not placed by the people themselves in a category different from that which includes the classes of sky-beings already mentioned.

A distinction between chiefs and commoners is apparent in the case of the Kayan of central Borneo. The chief, Akam Ijan, is said to be descended from the people of Apu Lagan, the sky-world, which is presided over by a female being who was once a woman on the earth.[1] One day the house of Uma Aging was celebrating the seed-time feast. The chief, Ledjo Aging, return-

[1] This, therefore, constitutes another case in which the "supreme being" is some one who once lived on the earth.

ing to the place where the ceremony had been held to seek a knife which he had forgotten, was astonished to see a crowd of light-coloured women sky-beings dancing round the "altar". When they saw him they fled, but the hair of one got entangled in the framework of the altar, and Ledjo Aging captured her and took her home to be his wife. Beneath Apu Lagan there is another world called Apu Kesio, but it is not said whether the ghosts of chiefs and commoners are assigned to separate places after death.[1]

The stone-using immigrants have caused warriors to be distinguished from the rest of the community in several places. To the evidence already collected the following can be added:—

The Kayan of Sarawak place their land of the dead underground, Apu Lagan being that part which is reserved for those who have died a natural death. No mention is made of Apu Kesio, but it is stated that the ghosts of women who die in childbirth and the ghosts of warriors go to a specially desirable part of the land of the dead and there become rich without working.[2]

The Kabui Naga who, like the Bontoc, make a special form of grave in the sides of mountains, also resemble them in distinguishing between warriors and ordinary people; for they say that the ghosts of warriors and hunters, together with those of people who erect a stone memorial, are specially favoured in the land of the dead.

The warfare of Indonesian peoples will not be discussed in this book. There is good reason to believe that the stone-using immigrants are responsible for the introduction of the practice of warfare among the indigenous peoples, who, prior to their arrival, were peaceful.[3] The evidence further suggests that head-hunting, which is the most prevalent form of warlike activity in Indonesia, is a modification of the custom of human sacrifice, which appears to be so intimately associated with the stone-using immigrants.

The distinction between warriors and the rest of the community will therefore, if the above thesis be established, be another manifestation of the influence of the stone-using immigrants upon the peoples of Indonesia.

[1] Nieuwenhuis. [2] Furness, 15 *et seq.*; Hose and McDougall, II, 40 *et seq*
[3] Perry (v).

CHAPTER XV.

HALF-MEN.

A LARGE number of tales concerning the doings of men and sky-beings have been recorded in Indonesia. It is not proposed to attempt any comprehensive examination of them here, but one remarkable group cannot be ignored.

The Ifugao say that Bugan, the daughter of the sky-being Hinumbian, came down to the earth and married an Ifugao man named Kinggauan. After a time the pesterings of the people drove her to return to the sky. She took her son with her, and tried to draw up her husband by means of a rope. But the rope broke, and it was not until she reached the sky that Bugan noticed that Kinggauan was still on the earth. She then came down to consult him about the boy, and they decided to cut him in two across the waist, so that each could have a part. When Bugan arrived in the sky she gave her half the breath of life and made it into a sky-being. The half which was left on the earth decayed, for Kinggauan did not know how to re-animate it. Bugan then descended and reprimanded her husband. She took away all that she could of the corrupted part of the body and with it made all sorts of creatures, most of them being pests and things of evil omen.

The Benguet Igorot say that a sky-being named Dumagid, who is said to have taught them many things, came down to the earth from one of the lower regions of the sky and married one of the Igorot women. They had a son named Ovug. After a time, when Dumagid said that he had to return to the sky, the people said that he could take his wife with him, but that he must leave the child as a security for his return. Dumagid told his wife that the way to his home would be so hot that she would probably perish on account of the heat. She persisted in going with him, and was killed by the heat. Dumagid returned

her body to the earth, and then went to his home in the sky. Later on he came back and told the people that he must take his son with him. This they refused, and thereupon he cut the boy in two down the middle. He took one part with him to the sky and re-animated it; the other he left on the earth. But when he looked down, he saw that it had been allowed to rot because the people had not given it new life. So he descended and made another beautiful boy out of the half which had become decayed. Then, making the two boys stand in front of the people, he asked the boy whom he had taken to the sky to talk. The boy spoke in a voice which sounded like sharp thunder, and the people were very frightened. Then Dumagid asked the other boy to talk, and he spoke with a sound like rolling thunder. Then the first boy went up to the sky whirling like fire and thundered there. It is believed that this is the origin of the lightning and the sharp thunder which comes after it, and it is believed that the low thunder is the voice of the boy who was made on the earth.[1]

In a Sangir tale a woman, as a punishment for scolding evil-speaking, and swearing, had a half-son.[2]

The Tobelo people of Halmahera have a tale of a woman whose child was a half. He was betrothed to the daughter of a king, but, being sad because of his deformity, went away across the sea. While he was on his journey some one saw him and told him to come to the shore. When he had arrived there he was told to go into a house, and there his body was joined to the other half, and one half of him was of gold and the other of precious stones. Another tale tells of a man who was half gold and half silver.

In a Loda tale the supreme being made the first human beings of earth. Their second child was a half, who wishing to be like his elder brother, went to the supreme being to ask him to make him whole. The supreme being, after telling him that he was born as a half because his mother had cursed and brought on floods, made him into a beautiful youth.[3]

In one tale recorded in Roti a half-boy set out to find the rest of him. After a time he met a woman and told her what he was seeking. She told him to go on until he came to two

[1] Beyer (ii), 105. [2] Adriani (i). [3] van Baarda (ii), 445, 274.

rocks which butted together like goats, and that, after passing between them, he would be in the sky-world. He then was to seek for the house of the chief of the sky. This he did, and the chief said to him, "What are you doing here?" The half-boy said that he had come to seek his other half. The chief then ordered his men to kill the half and put the pieces in a shell. When the shell was opened on the following evening, a well-shaped youth came out.

Another Roti tale is about a man who had four daughters, the three eldest of whom were married and had committed adultery. When the youngest grew up she refused to marry. She said, "I will marry myself and have children for myself and love myself". She then went into the bush, and, while the thunder and lightning came to the right and left of her, she was split into a man and a woman who married so that they should not commit adultery. They lived in a hollow tree. While the man was away one day a youth committed adultery with his wife.

In another tale from Roti it is said that a man had two sons. One of them married and his wife committed adultery. The other would not marry, so he went into the bush and induced a slave to cut him into two parts. After three days the slave came back and found that the youth had become two persons, a white youth and a white maiden. They married, and the man tried to prevent the woman from committing adultery, but failed.[1]

A tale of a half is recorded in Nias. A woman named Touti, the daughter of Touha, became pregnant. Her father asked her who was the father of the child. She replied that the child had no father because she had prayed to a sky-being to give it to her.

"How will you know," said her father, "that the child has come from the sky?"

"The proof," she said, "is that the child will be within me for nine years and that it will be a half. The other half is on high." And so when the nine years were passed the child was born as a half. After a time the boy went to the sky to find his other half.[2]

[1] Jonker (ii), 40 *et seq.* [2] d'Estrey, 293.

These tales can be divided into three groups. In one the children of sky-beings and people on the earth are halves, or are divided into halves, so that one half of the child can be on the earth while the other half is in the sky. In the second group a half child is born as a punishment for offences committed by the mother, these offences consisting of evil-speaking, scolding, and bringing on rain. In the third group a man or woman is divided into two people of different sexes who marry in order to avoid adultery.

In the first group of tales, which are reminiscent of those of Lasaeo and Lumawig in that they tell of sky-beings who settle on the earth and marry women of the people among whom they live, mention is made of the power which the sky-people possess of re-animating the dead by breathing the breath of life into them. This power of animation was found to be an element of those tales in which the first men are created in the form of images, and the importance which was therein attached to this power suggested that it was possessed only by sky-people. This conjecture is confirmed in the tales recorded in this chapter, for it is expressly stated that only sky-beings have the power of re-animating the dead. The other incidents of the tales are obscure as far as the results obtained are concerned.

The tales as a whole show that no fundamental difference appears to exist, in the minds of those who tell them, between the earth and the sky-world. Sky-beings live on the earth for a time, and take their earthly spouses or children to live with them in the sky-world. The way to this place is, in one case, between two butting rocks, and the supreme being is the "chief" of the sky. In another case the sky-world is reached across the sea.

CHAPTER XVI.

PUNISHMENT TALES.

AN important group of tales and beliefs must now be considered.

The Manabo of Mindanao in the Philippines say that once the occupants of a boat passing the promontory of Kagbubutang, near the town of Placer, saw a cat and a monkey fighting upon the cliff. This amused them so much that they began to laugh and to pass remarks, whereupon they and the boat were turned into stone.[1]

Beyer says that it is dangerous to imitate frogs, for it might be followed by thunderbolts and petrifaction. One day a man named Ango, who lived on a mountain with his wife and children, went with his dog to the forest in search of game. He killed a fine boar, but broke his spear in the process. Upon arriving at a stream he began to mend the weapon. The croaking of the frogs attracting his notice, he, imitating them, told them that it would be better if they would stop their noise and help him. His task ended, he continued his course up the torrent, but noticed that a multitude of little stones began to follow him. Surprised, he began to quicken his steps, and, looking back, he saw bigger stones joining in the pursuit. He then seized his dog and began to run, but the stones followed hot in his track, bigger and bigger ones joining the party. Upon arriving at his sweet-potato patch he had to slacken his pace on account of exhaustion, whereupon the stones overtook him and became attached to his finger. He could not go on, and called to his wife, who with her children tried to stop the petrifaction by placing the magic limes round him. All was of no avail, for his feet turned to stone, together with those of his wife and children. The following day they were stone up to the knees, and during the next three days the petrifaction continued from the knees to the hips and then to

[1] Beyer (ii), 90.

the chest and head. Thus it is that to this day the petrified forms of Ango and his wife and children are to be seen on the peak of Binaci.[1]

The Galela people of Halmahera say that, if it rains too much, incest has been committed by some one, and the rain only ceases when the offenders have confessed.[2]

A Tontemboan tale states that a child who refused to obey its parents was made to sink into a stone, and during the process of petrifaction it rained heavily. A sky-being of the Tontemboan, Rampolili, shot his nephew because he committed adultery with his wife. In another tale he shoots some one, and it thunders at the same time.[3]

Tales of petrifaction are recorded in central Celebes. Some stones on the west bank of the river Tretcher near lake Posso are the petrified remains of the village Duwangko: the great stone is the temple, the smaller stones are the dwelling-houses, and the smallest stones are the rice granaries. When the village was there, a needle was dropped one day through the floor of a house, and the cat was sent to fetch it. When the animal returned the people laughed at it. The whole village immediately turned to stone, and was covered by the waters of the lake. A similar tale is told of a village on the east shore of lake Posso which was overwhelmed with water and turned into stone. A large stone on the west shore of lake Posso is said to be the temple of Bantjea, which was swallowed by the sea. A large stone in lake Posso, near cape Ta ngKandau on the east shore, was once a village. One day while the chief was sitting in the temple, the whole village was covered with waves and turned into stone. The place where another village disappeared is called "molten land".[4]

The female image at Bulili, which has already been mentioned, is supposed to be that of a woman who was detected in adultery with her husband's brother, and beaten. During the punishment she turned into stone.[5]

The Iban of Borneo believe that certain rocks called *batu kudi*, "stones caused by the wrath of god," are the petrified remains of human beings who have been turned to stone as a punishment

[1] Beyer (ii), 90. [2] van Dijken, 514. [3] Schwarz, 228, 277, 284-5. [4] Kruij and Adriani, I, 14, 15, 16. [5] Kiliaan, 408.

for laughing at animals, breaches of hospitality, and incest. The "gods" turn the offenders to stone to the accompaniment of a great thunderstorm. Ling Roth recounts the tale of a man of Sembang who arrived with his young son one night at the village of Si Lebor. The chief of the village gave food to the man, but refused to give anything to his son. After a time a terrific storm came on and the whole house began to melt away until it and the people became molten lava, so that, when the storm ceased, nothing remained but huge masses of rock. A hill with precipices marks the spot. The hill is supposed to be the village, and traces of the house are still pointed out. The child, who was saved, became the ancestor of the Sadong chiefs.[1]

A "supernatural being" called Abang Gandei once lived in the Pinoh district of Borneo on Mt. Susur. After a time he moved down stream and lived on Mt. Siau near Modang. One day he caught an ape and clothed it with a waistband and a head-dress. The consequent amusement of his followers made the "gods" angry, and they caused a thunderstorm during which the houses and some of the men of Abang Gandei were turned into stones which can still be seen on the mountains. The other men were made into evil spirits.[2]

Messrs. Hose and McDougall tell us that "a limestone cliff whose foot is washed by the Baram river and which contains a number of caves (known as Batu Gadang or the ivory rock), is said by a Kayan legend to have been formed by a Kayan house being turned into stone owing to incestuous conduct within it".[3]

The Chinbok, one of the Chin tribes, state that a certain rock is one of their ancestors who was turned into stone for quarrelling when they were emerging from the ground.[4]

These tales tell of punishments for certain offences and by certain means. The table shows the nature of the offences and the accompanying punishments.

[1] Ling Roth, I, 205-7, 306. [2] Barth, 614. [3] II, 198. [4] Scott, 460.

	Offence.	Punishment.
Manobo of Mindanao.	Laughing at animals.	Petrifaction.
Luzon.	Laughing at animals.	Thunderstorms and petrifaction.
Galela of Halmahera.	Incest.	Rain.
Tontemboan of Minahassa.	Disobedience.	Petrifaction and rain.
	Adultery.	Shot with arrow to accompaniment of thunder and lightning.
Posso-Todjo Toradja.	Laughing at animals.	Floods and petrifaction.
To Bada (Bulili).	Adultery.	Petrifaction.
Iban of Borneo.	Laughing at animals.	Petrifaction and thunderstorms.
	Incest.	
	Breaches of hospitality.	
Pinoh district of Borneo.	Laughing at animals.	Petrifaction and thunderstorm.
Kayan of Borneo.	Incest.	Petrifaction and lightning.
	Laughing at animals.	

The modes of punishment are petrifaction, floods, thunderstorms, and the offences are laughing at animals, incest, and breaches of hospitality.

The first punishment to be considered is the extraordinary one of petrifaction. In addition to the incidents recounted in this chapter, other cases of petrifaction have already been mentioned, and it will be convenient to collect them in tabular form. But, before so doing, a tale from Roti must be recorded.

Once upon a time, it is said, the Portuguese, on a slave-raiding expedition, managed to entice on board their ships all of the population except the wife of a chief, who, fearing danger, ran away and hid herself in a cave. She saw the ship sail away, and when her people did not return, she said, "Why should I live any longer when my husband and children are gone and none of my relatives are left? The best thing is that I should die also." Thereupon she threw herself from the top of a rock; but her hair caught in a projection, and she remained suspended there until she died and turned into stone.[1]

The cases of petrifaction which are not mentioned in the punishment tales are collected here in tabular form :—

Roti : wife of chief throws herself from rock and petrifies.
Luang-Sermata : First ancestress came down rattan which turned to stone.
Bontoc : Lumawig turns his brother into stone.

[1] Jonker (ii), 23.

Ifugao: Son of sky-being turned into stone.
Bolaang-Mongondou: Batu Ijan. Ijan turned to stone after a flood.
Posso-Todjo Toradja: Wife of Lasaeo and creeper turned into stone. iDori and his wife turn into stone images. Tamangkapa turns into stone.
Tando ngKasa: Enemies turned into stone by guardian spirits of village.
Nias: Son of Sirio turns into stone.

Among the Bontoc, Ifugao, and Posso-Todjo Toradja, the stone-using immigrants are reputed to have been able to turn people into stone. The sky-beings of the Tontemboan petrify a small girl as a punishment for disobedience. The tale of Tengker and Kawalusan shows that in Minahassa the founders of villages were possessed of powers over water and rocks, but, although the capacity to petrify is not mentioned, it is probable that such a power was, in fact, ascribed to them. Ijan is turned by the sky-beings into a stone. In the Borneo tales the "gods" are said to petrify.

The sky-beings and the stone-using immigrants are therefore credited with the power to turn people into stone.

In a similar way they are supposed to have been able to control rain and water. iDori the son of Lasaeo, in central Celebes, Lumawig of the Bontoc of Luzon, the sky-beings of the Ifugao, and the sons of Kawalusan in Minahassa, brought water from rocks. Kawalusan brings on rain by asking for it, and his sons cause floods and bring water from rocks and the ground. A Toumpakewa tale from Minahassa recounts how the sky-being Wuriangan married a woman of the earth. After a time he and his wife went to the sky to live and left their son and his wife behind them. The son and his wife decided one day to go to the sky to visit Wuriangan and his wife. Their journey, which lay over the sea, was made to the accompaniment of much mist and thunder. When his son complained about this, Wuriangan told him how to control the elements, and this knowledge was handed on to the latter's descendants.[1]

The association between rain and the stone-using immigrants is further shown by the fact that in Timorlaut, Aru, and Kei offerings are made to the sun-lord when rain is needed. In Savu *Pu-lodo-liru*, the sky-lord, has under him *Uli-hia* or *Uli-sia* and *Hai-hajo*, to whom the wind and rain are entrusted: also *Latia*,

[1] Juynboll, 321.

who has charge of the lightning. Offerings are made to these beings during droughts.[1]

The power to control rain and floods is therefore vested in the stone-using immigrants, the people of the sky-world, and their descendants on the earth.

Thunder and lightning must now be considered. Various ideas as to the cause and nature of these phenomena are held in Indonesia.

It has already been said that a sky-being is supposed, in Savu, to have control of lightning. In south-west Timor, Usi-neno, the sun-lord, sends thunderstorms.[2] In Wetar the people are unable to explain the nature of thunder and lightning. On the other hand, thunder and lightning are supposed in Keisar to be caused by the fighting of the supreme being against the evil spirits. The people of Leti Moa and Lakor and of the Babar Islands are unable to explain the nature of thunder and lightning. In the Aru Islands thunder is said to be due to the strife between the rain and the wind, but the people of these islands are unable to explain the nature and origin of lightning. In Seran and Watubela no cause can be assigned for thunder and lightning, but the people of Ambon say that these phenomena are caused by *Upu Lanito*, the sky-lord, waging war against the evil spirits, "thunder teeth" being scattered about during the fighting. The nature of thunder and lightning cannot be explained in Buru.[3]

The most definite conceptions of the cause of thunder and lightning are those recorded in the west part of the Timor region, where the influence of the stone-using immigrants has apparently been strongest. The explanations given further to the east, in Keisar, Aru, and Ambon, are more vague. The distribution of places where no explanation is recorded, Wetar, Leti Moa and Lakor, Watubela, Seran, and Buru, is of interest. Wetar, Seran, and Buru have no stone village walls, so far as I know, and the stone-work of Seran and Buru is confined to offering-places in Seran and offering-places and graves in the south part of Buru. The stone-work of these islands is therefore such as to suggest a weak influence on the part of the stone-using immigrants. So,

[1] Wilken, III, 174, 179. [2] Bastian, II, 2. [3] Riedel (iv), 458, 428, 398, 364, 330, 309, 270, 213, 145, 85, 28.

in places where the influence of the stone-using immigrants has been weak, ideas about the cause of thunder and lightning are vague or absent altogether.

The manner and distribution of the explanations of the causes of thunder and lightning are such as to suggest that they are due to the influence of the stone-using immigrants.

Among the Bontoc, thunder is said to be the voice of the wild boar calling for rain, and lightning is the voice of the sow which accompanies him.[1] In one of the tales of half-men an account is given of the origin of thunder and lightning. The child of a sky-being and an Igorot woman is divided into two boys. The sharp thunder is the voice of the boy who was taken up to the sky; when he went up whirling like fire the lightning originated: the voice of the other boy is the rolling thunder. In Minahassa the evidence concerning the relation between the sky-people and thunder and lightning is definite, for a sky-being gave his son the means of controlling these things. Rampolili, "the holy face," who is one of the sun-lords of the Tontemboan, shot his nephew with an arrow, and when he shot thunder and lightning accompanied the action. When Muntu'untu, another of the Tontemboan sun-lords, comes to the earth, he is accompanied by thunder and lightning. A Tontemboan tale states that while a man named Mailensum was trying to cut a bamboo, thunder and lightning came, and he was surrounded by a mist, out of which appeared two girls who asked him if he wished to be made into a sky-being. He agreed, and was taken by them to the river Malaku and bathed, and during the process the thunder rolled and the lightning played around.[2]

The Tangkhul Naga state that thunder and lightning are caused by a sky-being who stamps on the ground and brandishes his sword.[3]

The evidence therefore agrees in associating thunder and lightning with the sky-people, and in ascribing to these people and to their descendants on the earth the power to control these things.

The modes of punishment which occur in the tales have now been examined, and the result has been to show that only the sky-people and their earthly descendants are credited with the

[1] Jenks. [2] Schwarz (i), 316. [3] Hodson, 138.

powers of petrifaction, of bringing on rain and floods, and of causing thunder and lightning.

It will now be necessary to consider the offences for which these punishments are meted out.

The only suggestion which I am able at present to make concerning the offence of laughing at animals is that the stone-using immigrants had certain ideas concerning animals which were not possessed by the indigenous peoples, and that the laughter of the latter caused them to become angry. The prohibition apparently only extends to a limited number of animals, which suggests that some definite reason must lead the sky-people to wreak their vengeance on those who offend in a manner which is apparently so inoffensive.

Lack of hospitality causes the wrath of the sky-people. No information is to hand with regard to this cause of offence.

Incest is an offence in the eyes of the sky-people. This is shown by the custom of the Posso-Todjo Toradja, who perform a ceremony in honour of Pue mPalaburu, the sun-lord, each year before the rice is planted. An offering is made to him in case incest has been committed during the course of the year. Pue mPalaburu shows his displeasure by causing droughts, earthquakes, rain, and so forth. Kruijt and Adriani say that "Before the rice is planted, generally before the fields are prepared, a ceremony takes place which the Toradja call *maandu sala*, 'the cleansing from sin'. By sin they mean more especially 'incest'. This offence has as a consequence, so the Toradja think, that a drought comes or heavy rain falls; in either case the crop fails. 'Incest' here means marriages between parents and children, between uncles (aunts) and nieces (nephews), and between brothers and sisters. . . . The Toradja believe that incest can happen in secret places without being discovered. People can even offend unwittingly on account of the very complicated relationships between two persons who marry, as is evident in a small community where endogamous marriages are the rule."[1]

Thus the sun-lord is directly connected with incest, which he punishes by rain, drought, and earthquakes. The offence and the punishment are therefore connected with the stone-using immigrants to central Celebes.

[1] II, 246 *et seq.*

The question of incest is complicated. For, although the sky-people appear to view it with displeasure, they not only themselves seem to contract such unions, but they also give permission for the survivors of floods to do so (p. 102).

The evidence at our disposal points to the sky-people as the authors of the various punishments. It also associates these people with the offence of incest, but at present it does not enable us to understand why laughing at certain animals and lack of hospitality should cause their wrath. An examination of the table on p. 127 shows that incest is punished by rain, lightning, petrifaction, and by drought (this last mode of punishment is mentioned in the account of the Toradja rice-growing ceremonies). Petrifaction, on the other hand, is the punishment for adultery, incest, laughing at animals, and breaches of hospitality. It may indeed be shown that all the offences and punishments are so intertwined that it is impossible to disentangle them. Petrifaction, thunder and lightning, floods and drought are only a few of the many ways in which punishment could be inflicted. On the other hand, the offences are few and bizarre. It is therefore possible to claim with confidence that these tales are to be ascribed to certain circumstances in the interaction between the stone-using immigrants and the indigenous peoples of Indonesia.

The knowledge gained in this chapter enables us to understand the point of the following tale from Nias.

A woman of Nias, Iwolache by name, was pregnant. She told her husband that she wanted something piquant to eat. He could find nothing that would please her, and in desperation asked her to say what she wanted. She said that she would like some lightning, and that the way to get it was to put a loin-cloth round the dog and to make the cat dance on the roof. Thus he procured what she wanted. The point of the tale is that the woman evidently knew that the act of making the two animals ridiculous would anger the sky-people and make them send lightning.[1]

In the tales from Borneo cited in this chapter it was said that the "gods" punish the offences of laughing at animals, incest, and breaches of hospitality with thunder and lightning and petrifaction. It would seem that these beings are the *to*

[1] Sundermann.

belare of the Kayan of central Borneo or *toh* of the Kayan of Sarawak. The *to belare*, "thunder gods," are said to punish misdeeds such as laughing at animals. Lightning is their glance and thunder their voice, and they are believed to be able to show themselves as thunder and lightning, wind and rain. The *toh* of the Kayan of Sarawak are "the powers that bring misfortunes upon a whole house or village when any member of it ignores tabus or otherwise breaks customs without performing the propitiatory rites demanded by the occasion".[1]

The information which is given about these beings suggests strongly that they are akin to the sky-beings of other peoples of Indonesia, or, what is the same thing, to the stone-using immigrants. That they probably are the traditional representatives of the immigrants is shown by the belief of the Kayan that they live in caves in the mountains in communities similar to their own.

Thunderstones.—In Indonesia there is a widespread belief that stone implements are connected with thunder. The description of the stone *sirui* which is supposed by the people of certain villages in Wetar to be connected with Sirui, suggests that it is an artifact. Stone implements which are kept in a house near to that which contains the *sirui* stone are associated with Malihi, the wife of Sirui. These stones are called thunderstones.[2] The people of Leti Moa and Lakor call stone implements thunderstones, but in the Babar Islands no explanation can be given of the origin of such stones.[3] van Hoevell procured in Timorlaut some stone implements which were called thunderteeth: the warriors use them as amulets. Ribbe states that stone adzes are regarded in the Aru Islands as thunderteeth. In Seran and Ambon stone implements are regarded as thunderstones. Riedel was told in Buru that thunderstones are never found, but he says, "this is not to be believed, for the language of this island contains a name for them (tela vaga)".[4] The people of Galela and Tobelo in Halmahera believe that stone implements are the teeth of a dragon which lives in the clouds.[5] The people of Minahassa call stone implements "thunder teeth" or "lightning

[1] Nieuwenhuis (ii), I, 97, 98, 319, 312; Hose and McDougall, II, 19 *et seq.*, 26.
[2] Riedel (iv), 436. [3] Ibid., 398, 364. [4] Ibid., 145, 85, 28. [5] Ibid. (iii), 89.

stones".[1] Grubauer found among the To Lampu of central Celebes a stone implement which was regarded as a thunderstone.[2] In Borneo there is a widespread belief that stone implements are the teeth of the sky-being who controls the thunder. Stone implements are used in Nias to procure rain.[3]

Only stone implements are supposed to be thunderstones. In some places they are said to be the teeth of a dragon or of a sky-being who controls thunder. The belief that a dragon lives in the sky is certainly not indigenous to Indonesia; it has been introduced from elsewhere. It is therefore probable that the belief that stone implements are the teeth of such a beast has been introduced along with the belief in the creature itself. The fact that stone implements are said to be thunderstones in places, Wetar and Seran, where no explanation of the nature and origin of thunder and lightning is not forthcoming, is again suggestive of the introduced nature of the belief. Thunderstones are in Wetar associated with people who appear to be stone-using immigrants to that island. This association, together with the general connection supposed to exist between such stones and thunder, suggest that the stone-using immigrants are the introducers of the idea. In order to make this matter certain it will be necessary to show that the stone-using immigrants have introduced the belief in dragons, but this task cannot be attempted here.

[1] Wilken, III, 156. [2] 442. [3] Wilken, III, 158.

CHAPTER XVII.

TERRACED IRRIGATION.

LUMAWIG is said to have taught the Bontoc the craft of agriculture. A glance at the plates in Jenk's monograph will show that these people cultivate their land, which is mountainous, by means of irrigated terraces. They practise this form of cultivation on an immense scale by means of terraces which, extending up the sides of mountains for thousands of feet, produce the effect of gigantic staircases and amphitheatres. These terraces generally have stone retaining walls, and stone dams are made to regulate the water supply. Plates 2 and 3, which show the terraces made by the kindred Igorot, give an idea of the magnitude of such works.

The fact that the Bontoc claim to have learned their agriculture from Lumawig suggests that the stone-using immigrants introduced terraced irrigation to Indonesia. I propose to follow up this clue, and to collect the evidence concerning the existence of terraced irrigation and kindred forms of cultivation in Indonesia.

Elaborate irrigation is carried on in Sumbawa.[1] Ten Kate mentions that canals lead water to the rice-fields in Sumba.[2] Jenks says that terraced irrigation is practised in Formosa as well as in Luzon in the Philippines.[3]

Terraced irrigation probably exists in Minahassa, for Wilken mentions wet rice-fields.[4]

In central Celebes a distinction exists between the agriculture of the Bada-Besoa-Napu group and the other mountain peoples on the one hand, and the Posso-Todjo group on the other hand. Kruijt and Adriani say that "the Toradja of the Posso-Todjo group formerly only had dry rice-fields on the sides

[1] Perry (iv). [2] (i), 631. [3] 88, 91. [4] (ii).

of the mountains. . . . The people of the Parigi-Kaili group (i.e. the Bada-Besoa-Napu group, the To Kulawi and others) have for a long time grown their rice almost entirely in wet fields, which are irrigated by canals that bring the water from the rivers."[1] Much terraced irrigation is carried on in the Sadang district. Grubauer reproduces photographs of terraces at Kambutu, in the Simbuang-Mapak valley, at Tondong, Awang, Bamba, and in the Molu valley.

Some of the coastal peoples of Sarawak and British North Borneo practise irrigation. Hose and McDougall mention the Dusun of British North Borneo and the Kalabit of Sarawak in this connection.[2]

Irrigation is practised in Nias, but no mention is made of terraces.[3]

The Khasi have irrigated terraces. "The bottoms of the valleys are divided up into little compartments by means of fairly high banks corresponding to the Assamese *alis* and the water is let in at will into these compartments by means of skilfully contrived irrigation channels, sometimes a mile or more in length."[4]

Mr. Hodson says of the Naga tribes: "We have in this area tribes who migrate periodically and practise only the jhum system of cultivation. We have tribes such as the Kabuis (and possibly the Marrings), who keep to their village sites with tenacity, but are compelled to change the area of their cultivation year by year in set rotation. They preserve the memory of other days by taking omens annually to decide the direction in which the cultivation is to be. We have large villages (e.g. Mao, Maram, Mayang, Khong) with extensive terraced fields magnificently irrigated with water brought from considerable distances in channels so well aligned that every advantage is taken of any natural slope encountered, and awkward corners avoided or turned with admirable ingenuity. But this method of cultivation is not practicable everywhere, and fortunate are the tribes who occupy hills whose declivity is not too steep for such fields. By means of long and assiduous labour, a field may be built up and provided with water so that the large terraces represent

[1] II, 231. [2] Ling Roth, I, 406; Hose and McDougall, II, 253. [3] Rappard, 549. [4] Gurdon, p. 40.

PLATE II.—Igorot Terraced Cultivation.

the expenditure of a vast amount of energy and farming ability, as well as much practical engineering skill. . . . The fields are embanked, wherever possible, with small stones. In many villages, especially in the Tangkhul area, may be seen abandoned fields, which, according to tradition, were cultivated when the village was larger and more prosperous than it now is. But in crowded villages, as in the Mao group, patches of jhum cultivation exist which are semi-permanent, as they are cropped one year and left fallow for two years, which is not really long enough for any heavy jungle to grow.

"Nearly every tribe has some terraced fields, but among the Kabuis, Quoireng, Marrings, and Chirus, jhum cultivation provides the bulk of their sustenance."[1]

The Karen have terraces provided with stone retaining walls about 6 feet high.[2]

The accounts sometimes only state that irrigation is carried on and make no mention of terraces. But terraces are so essential to irrigation systems where the ground is not quite flat, and the country in Indonesia is generally so hilly, that there need not be any hesitation in including all the irrigation systems of Indonesia under the heading of terraced irrigation.

In central Celebes terraced irrigation is practised by the Bada-Besoa-Napu group, by neighbouring peoples such as the To Kulawi, and in the Sadang region; that is to say, in places where megalithic monuments exist.[3] It is not practised by the Posso-Todjo group. This distribution is such as to make it probable that those who introduced the custom of building megalithic monuments also practised terraced irrigation. The To Napu seem to be aware of this fact, for they state that the sky-people have irrigated terraces.[4]

A comparison between the distributions recorded in the table at the end of the book and that of terraced irrigation discloses a remarkable similarity between this latter distribution and that of megalithic monuments. This is shown by the table.

[1] Hodson, pp. 50-1. [2] Colquhoun, "Amongst the Shans," 65. [3] Heer Kruijt writes to say that the distribution of stone-work in central Celebes coincides with that of terraced irrigation. I am much obliged to him for this verification of the above conclusion. [4] Kruijt and Adriani, II, 260.

	Terraced Irrigation.	Megaliths.
Sumba	+	+
Roti	+	?
Kei		+
Seran		+
Halmahera		+
Bontoc	+	
Igorot	+	
Ifugao	+	
Formosa	+	?
Minahassa	+	+
Bada-Besoa-Napu Toradja	+	+
Sadang Toradja	+	+
Dusun (B.N.B.)	+	+
Nias	+	+
Khasi	+	+
Naga	+	+
Karen	+	?

The similarity between the two distributions is really closer than the table appears to show. For, in the Kei Islands and Seran, megalithic monuments are, so far as I know, confined to offering-places which are associated with brotherhoods, the founders of which do not appear to have been some of the original stone-using immigrants to Indonesia. Megalithic monuments are not habitually erected in these places in the same way as, for example, in the Sadang district. I have no information regarding the existence of megalithic monuments in Roti and in Formosa, but suspect that they are to be found in the former place. I have practically no information about Halmahera.

The only place where the correspondence does not appear to hold is Luzon, and exception should prove to be of great interest when the necessary facts are available. The circumstances in which the use of stone was introduced among the Bontoc are such as to suggest that the absence of megalithic monuments is perhaps to be associated with the fact that Lumawig did not found a line of chiefs.

The megalithic monuments of Indonesia, we have concluded, are the work of stone-using immigrants. The fact that these forms of stone-work exist in places where terraced irrigation is carried on is illuminating. For the photographs of terraced irrigation which have been reproduced in Plates 2 and 3 make it abundantly clear that an immense amount of labour and time is

required in order to construct and maintain such systems, and a high state of organisation and co-operation must exist in communities which are capable of such great and sustained efforts. The association between terraced irrigation and megalithic monuments, that is, between a peculiar and complicated mode of cultivation and stone-work of distinctive types, for which, according to conclusions reached in this book, the stone-using immigrants are responsible, taken in conjunction with the tradition of the Bontoc and the belief of the To Napu, suggests strongly that the stone-using immigrants introduced terraced irrigation to Indonesia. The stone-using immigrants must have possessed a culture far in advance of that of any of the peoples among whom they settled. They have only succeeded, it must be noted, in introducing terraced irrigation in places where the presence of megalithic monuments suggests that they have influenced the indigenous culture to a considerable extent.

The correlation between megalithic monuments and terraced irrigation suggests that all the original stone-using immigrants to Indonesia were people who built megalithic monuments and practised terraced irrigation, and that they settled in certain places, whence spread the influence of their culture. But the circumstances in which the culture associated with the use of stone was introduced to various parts of Indonesia differ so profoundly that much caution must be exercised in this matter. In some places, as in south-west Timor, the immigrants were "children of the sun," but they did not, so far as I know, introduce terraced irrigation. On the other hand, the introducers of terraced irrigation to Sumba do not seem to have left behind them chiefs who claim descent from a sun-lord. Such difficulties, and more which could be adduced, show that it is only possible to claim that, in general, the stone-using immigrants were people who possessed the custom of building megalithic monuments and the practice of terraced irrigation, that some of them were children of the sun, and so forth. The reasons for the many variations in the manner of introduction can only be seen when the provenance of the immigrants has been determined for each case.

Terraced irrigation is used for the growing of rice. The Posso-Todjo state that Lasaeo taught them to grow this cereal,

and other peoples of Indonesia claim to have learned their rice-growing from the sky-world.

The people of Wetar and Keisar state that the cultivation of rice was brought by their ancestors from the west, the direction whence the stone-using immigrants into these islands came.[1] In Minahassa it is said that the knowledge of rice and of the method of growing it was derived from the sky-world.[2] A similar claim is made by the Toradja. The Posso-Todjo group say that a man went to the underground world to pay a visit. When he was returning the people told him to go on until his path divided, and then to take the left-hand branch. He did so and came to a river across which a log was placed. He dared not attempt to cross thereby, and, turning back, retraced his steps and took the other branch. This took him to the Pleiades, the people of which taught him all about agriculture. He got back to the earth by jumping.[3]

The Olo Ngajdu of south-east Borneo say that the son of the supreme being taught them to grow rice.[4]

There is thus a certain amount of evidence that the stone-using immigrants have taught the people of Indonesia to grow rice.

[1] Riedel (iv), 409, 456. [2] Schwarz (i). [3] Kruijt and Adriani, I, 230, 237.
[4] Hardeland (i), *langit*.

PLATE III.—Igorot Terraced Cultivation.

CHAPTER XVIII.

THE PRIESTHOOD.

A TRADITION recounted in the eleventh chapter states that the sun-cult was brought to Luang-Sermata by strangers from the west. It is said too that the priests of the neighbouring islands have to visit Luang-Sermata at least three times during their lives, because it is the place of origin of their religion. I propose in this chapter to inquire who these priests are, and to determine their position in the scheme which is being elaborated.

In Dama the priests belong to the chiefly class. The priests of Wetar keep the sacred stones which are found in the villages of this island. Riedel mentions the *sirui* stone, already described (p. 56), which came from Timor. It was brought thence by a man named Mauiak, whose descendant looks after it.

The priests of Keisar, together with the chiefs, form the upper class.

In each village of the Leti Moa Lakor group a priest and priestess serve the guardian spirits, who live in two images in the middle of the village. The priest and priestess, who are the direct descendants of the man and woman whose ghosts are the guardian spirits, belong to the nobility, which, as a class, is said by Riedel probably to be of foreign origin.

Each village in the Babar Islands has two guardian spirits, male and female, to whom offerings are made through the priest, one of the chiefly class, who is descended from the first builders of the village. In Letwurang of these islands prayers for rain are made to two images in which live two spirits, Rupiai and Upurepre, who have come to Babar from elsewhere. These images are kept near the house of the direct descendant of the man who brought them to the island. This man set out on a journey to Timorlaut, but lost his way and arrived at the land of

the sky-people. They gave him the two images, upon which they said that, in order to procure rain, water must be poured by a woman.

The priests in the Luang-Sermata group are the descendants of the first possessors of the land and belong to the nobility. Each lives in the village temple, where are the images in which live the ghosts of his ancestors, the founders of the village.

According to Riedel no definite priesthood exists in Timorlaut, but certain people, called *itrana* and *itwata*, who belong to the nobility, seem to be in closer contact with the "spirits" than others.[1]

The priests in these islands belong to the nobility, a class which, according to the conclusions arrived at, is of immigrant origin. They are descended, in some places, from those whose ghosts are the guardian spirits of villages, that is to say, if we accept the conclusions of chapter viii., from stone-using immigrants. In certain cases information is given which supports these conclusions: the priest who looks after the *sirui* stone in Wetar is said to be the direct descendant of a stone-using immigrant; the nobility of the Leti Moa Lakor group is said by Riedel probably to be of immigrant origin; and the two images in Letwurang of the Babar Islands came from the sky-world. The evidence therefore agrees in identifying the priests of these islands as the lineal descendants of stone-using immigrants, who are claimed as the founders of villages and the guardian spirits thereof.

The priests are concerned with two different cults: one is that of their ancestors; and the other, which is connected with the sky-world, was brought by these ancestors and handed on to their priestly descendants. In some cases these guardian spirits are said to be those of the founders of villages. I shall reserve the discussion of this tradition for some future time. The available evidence suggests that the stone-using immigrants introduced to Indonesia the custom of living in villages.

The facts which we possess about the cults of Timorlaut are indefinite. No hereditary priesthood is reported, and the sun-cult is said not to include such periodic ceremonies as are performed

[1] Riedel (iv), 463, 437, 406, 384, 375, 373, 339, 320, 293, 281-2.

in the islands to the west. Riedel says that everybody can approach the sun-lord without any intermediary, a state of affairs which contrasts with that in the other islands of the Timor region. The presence in Timorlaut of people who stand in a closer relationship to the "spirits" than the rest of the community suggests that there is really some kind of priesthood in these islands. But the information relating to Timorlaut is so scanty that it is necessary to await more facts before forming any opinion about this apparent exception.

In each village of the Kei Islands there is an image in which lives the ghost of the founder of the village. Offerings can only be made to this being by a direct descendant.

The Watubela people have a class of hereditary priests who act as intermediaries between the earth and the sky-world.

In Seran chiefs and priests are chosen from the members of the Kakian club of the Patasiwa.

In Buru no priesthood exists and no cult is attached to the sky-lord, of whom the people have but a vague conception.[1]

The evidence derived from the consideration of the priesthoods of Kei, Watubela, Seran, and Buru supports the conclusion already formed. The priesthood is hereditary and its members are nobles, and, consequently, we suppose, of immigrant origin: in Seran the priesthood is formed of members of the Patasiwa, an organisation which, according to the available evidence, owes its existence, directly or indirectly, to the stone-using immigrants. Conversely, no priesthood exists in Buru, an island where the influence of the stone-using immigrants appears to have been very slight.

Hereditary priesthoods exist elsewhere in Indonesia. The Bontoc have hereditary village priests.[2] Among the Olo Ngadju of Borneo the descendants of the two persons whose bodies floated down the river and petrified are priests in charge of the remains of their ancestors.[3]

In south Nias there are hereditary priests who are the head chiefs of their villages. They claim descent from Boronadu, the son of a sky-being named Lamonia. Boronadu is said to have been the first of the images, *adu*, which are used by the priests in Nias; and the knowledge of the use of these images is said to

[1] Riedel (iv), 220, 194-5, 101, 99, 88, 16, 17. [2] Jenks, 305. [3] See p. 62.

have been derived from the sky-world. The *Boronadu* have charge of the sacred trees of the villages and of the great images beneath them. Some of these trees are said to have been planted by sky-beings; one, indeed, by Lowalangi, the supreme being himself.[1]

The Khasi have hereditary priests, called *Lyngdoh*, who are always chosen from the Lyngdoh clan. There is usually more than one *Lyngdoh* in each Khasi state. Sometimes there are many, as in Nongkrem, where each division of the state has one. In some Khasi states the *Lyngdoh* is the ruling chief.[2]

The Naga tribes have hereditary priests, who, in some cases, have charge of the sacred stones.[3]

The evidence forthcoming from Borneo, Nias, and Assam adds further support for the conclusion that the members of the hereditary priesthoods of Indonesia are the descendants of immigrants who introduced the culture associated with the use of stone. These hereditary priests are, as in the Timor region and elsewhere, the keepers of sacred stones and images in which live the ghosts of their ancestors, the guardian spirits of the village. The functions of the hereditary priests of Nias are similar to those of the priests of the islands at the east end of the Timor region, for they are in charge of images and of the banyan-trees, one of which is found in every village of the islands of the Timor region which have been mentioned in this chapter, as well as in those of south Nias.

The claim of the hereditary priests of Nias to be descended from the "first image," a being of the sky-world, whence the knowledge of the use of such images came, suggests that the stone-using immigrants introduced to Indonesia the practice of making images. I propose to defer the consideration of this matter.

The priesthoods of Indonesia are not always hereditary. Among certain peoples, the Posso-Todjo Toradja for example, the members of the priesthood are initiated to their craft. The initiated priesthoods of the Toradja, the Olo Ngadju, Olo Dusun and Kayan of Borneo consist mainly of women.[4] In this they

[1] Modigliani, 619, 499. This is another case in which the supreme being is said to have lived on the earth. [2] Gurdon, 109. [3] Hodson, 140. [4] Kruijt (iii), 99 *et seq.*

PLATE IV.—Stone Dam made by Igorot.

differ from the hereditary priesthoods, the members of which are usually men. The initiated priesthood differs in another way from the hereditary priesthood, for its members are not drawn from the chiefly class, but sometimes, as among the Olo Ngadju, are slaves.

Although a profound difference appears to exist between the hereditary and initiated priesthoods of Indonesian peoples, yet both derive their craft from the sky-world. The Toradja say that their first priestess was a woman who was taken when ill to the sky and there taught the craft of the priesthood;[1] the Tontemboan of Minahassa say that their priestcraft was learned from the sky-world;[2] and the initiated priesthood of Nias was founded by sky-beings called *bela*, who are descended from Bela, son of Balugu Luo Mewona, a sky-lord.[3]

The crafts of the initiated priesthoods of the Posso-Todjo Toradja, Olo Ngadju, Olo Dusun, Kayan, and of south Nias are similar. Each priestess—I shall use the feminine term, for the majority of the members of the initiated priesthood are women—works with the aid of a friendly sky-spirit whom she calls by name.[4] The Toradja call these spirits *wurake*, the Olo Ngadju *sangiang*, and the people of Nias *bela*. It is the duty of the priestess to chant a sort of litany which describes the manner in which her sky-spirit aids her to do what is needed. Different parts of the litany[5] are used according to the object of the priestess, but all the ceremonies performed by the priestesses are founded on a common plan.

Since the knowledge of the craft of the initiated priesthood is supposed to have come from the sky, it follows that the stone-using immigrants must have taught the priestesses the litanies which they use, for this constitutes their craft.

One feature of these litanies makes it fairly certain they could not have been elaborated by the people whose priestesses chant them. They are composed in a language which is mostly unintelligible. Hardeland[6] says that the language used in the litanies of the Olo Ngadju is called the *sangiang* speech, that is, the speech of the sky-spirits who assist the priestesses. This speech includes:—

[1] Kruijt and Adriani, I, 374. [2] Schwarz, 379-80. [3] Rappard, 579; Chatelin, 132. [4] Kruijt and Adriani, I, chap. xii.; Hardeland (i), *sangiang*. [5] I follow Kruijt in the use of this term. [6] (ii), 4, 210.

1. Many ordinary or slightly altered Olo Ngadju words.

2. Malay words which are not in general use among the Olo Ngadju, these words being usually much altered.

3. Many words of which Hardeland knew nothing at all. He says "the priests are quite ignorant of the real meaning of many of the words of this last class".

The priestesses of the Kayan use a strange language in their litanies.[1]

Adriani says that the Posso-Todjo Toradja have a special language called *wurake*-speech, which is used in the litanies of the priestesses. Some of the words of this language are used in poetical writings: others are used in ordinary language as synonyms, or in riddles; and the meaning of others, again, is unknown to the priestesses. These litanies are entirely incomprehensible to the laity; indeed "many who can declaim them do not understand them". Very few priestesses can chant the whole of a litany. Most of them have learned fragments from the more experienced members of their profession, and while a litany is being chanted they sit round and join in when they can.[2]

Why does this apparently meaningless ritual survive among people such as the Posso-Todjo Toradja who have no descendants of stone-using immigrants among them who might ensure its persistence? For what purposes are members of the initiated priesthood required?

The Tontemboan priestcraft is concerned for the most part with ceremonies connected with rice-growing. Schwarz says that "the old Minahassa religion had its centre in the various ceremonies which were concerned with the getting of crops. The *tona'as im panguman* or 'garden-priest,' and the *walian im uma* or 'garden-priestess,' were foremost of all those who were leaders and councillors in religious matters".[3] The Minahassa people say that formerly they grew no rice because they did not know the necessary ceremonies. The knowledge of growing rice is said to have come from the sky-world. So, since crops are only procured by the performance of ceremonies which were instituted by the sky-people, practical reasons would ensure the persistence of these rites and, consequently, that of the priesthood which possesses the necessary knowledge.

[1] Kruijt (iii), 106. [2] Kruijt and Adriani, III, 37-8. [3] 159.

Another important function of the priesthood is that of curing disease. Only the members of the priesthood, hereditary or initiated, possess the necessary knowledge: or rather, in the case of the latter, they only can summon the sky-spirits who can effect a cure. In Nias the *bela* spirits tell the priests the kind of wood of which an image must be made in order to cure the illness. Once leechcraft[1] has, for any reason, become a profession, the members of which alone have the necessary knowledge for the exercise of this profession, the normal recurrence of disease will ensure its persistence.

Priestesses also conduct the ghosts of the dead, especially those of chiefs, to the land of the dead. And they perform ceremonies connected with house-building.[2]

The craft of the initiated priesthood differs much from that of the hereditary priesthood. The members of the latter are in direct communication with the beings of the sky-world, and act as intermediaries between the earth and the sky. They also carry on a cult of their ancestral ghosts, the guardian spirits of villages. But when this hereditary priesthood is lacking, all direct connection between the earth and the sky is at an end, and no cult of guardian spirits appears to exist. The duties of the initiated priesthood are concerned with leechcraft, rice-growing, funerals, and house-building, but especially with the first two, and the members of the initiated priesthood can only act with the aid of a sky-spirit.

Who are these friendly spirits? The *wurake*, *sangiang*, and *bela* are said once to have been on the earth in friendly intercourse with men, but now they live in a region between the earth and the sky in communities similar to those on the earth. It is therefore possible that these spirits were hereditary priests who acted as intermediaries between the earth and the sky. That this is possible is shown by the fact that the hereditary priests of the Khasi are associated with priestesses for whom they perform ceremonies as intermediaries.

Another important feature of the initiated priesthood will have to be taken into account when the attempt is made to determine the origin of the priesthoods of Indonesia. The

[1] I follow Dr. Rivers in adopting the use of this term. See his Fitzpatrick Lecture, "Lancet," Jan. 8, 15, 1916. [2] Kruijt (iii), 339 *et seq.*

Posso-Todjo Toradja, the Olo Ngadju, Olo Dusun, and Kayan have initiated priests. These priests invariably dress as women, and sometimes even marry men. The priestesses of Borneo act as public prostitutes, and, so far as I know, form the only class of prostitutes in that island. The initiated priests also act as prostitutes.[1]

[1] Hardeland, *balian*, *basir*.

CHAPTER XIX.

"SOUL-SUBSTANCE."

ALTHOUGH it is possible that the absence of a hereditary priesthood serves to explain the lack among the indigenous peoples of cults associated with the sky-beings, it does not, however, account for the persistence of the craft of the initiated priesthood. Some definite reason must exist for the existence of a profession the members of which chant litanies that they do not understand. It was said in the last chapter that, once such a profession is established in the possession of exclusive knowledge of practical importance, its persistence is assured. But it is necessary to know why it ever became established, to discover what is the knowledge which is of so great importance.

It is to Heer Kruijt that we are indebted for the information necessary for the understanding of this question, and all ethnologists owe him a debt of gratitude for this contribution to science. It will be seen that the greater part of the evidence used in this chapter has been collected by him. He gives an account of the Toradja theory of leechcraft.[1] According to this people human beings live because they are animated by a "soul-substance,"[2] to the presence of which all the manifestations of life and health are due. It is loosely connected with the body, which it may leave, as the result, for example, of a sudden fright. If one person has an intense longing for another, his soul-substance will sometimes leave the body and travel to the vicinity of the desired one. Deaths from home-sickness are caused by the continued absence of the soul-substance.

It leaves the body during sleep and wanders about, going sometimes to the land of the dead to visit deceased relatives.

[1] Kruijt and Adriani, I, chapters x. and xii. [2] This is the term used by Kruijt. I adopt it without any discussion as to its suitability. Perhaps "vital essence" would convey the idea more exactly.

On occasion a man will sleep in a spot where his soul-substance will meet with the ghost of some person who will advise him with regard to the future. Great importance is therefore attached to dreams as being the real experiences of the soul-substance. The possible absence of the soul-substance during sleep makes it necessary to be careful to wake a sleeper gently; for, if he should be disturbed while the soul-substance is still away, he would die. No one may step over a sleeping person.[1]

The Toradja have confused ideas about the actual nature of the soul-substance. It is called *tanoana*, which means "little man": in this form it is a minute copy of its owner. It is also called *wajo* or *limbajo*, and then is supposed to be the shadow.[2]

The favourite mode of exit and entry is by the fontanelle on the top of the head. It can also enter and leave by the mouth, nose, ears, and joints. If a patient sneezes in the morning, it is a sign that the soul-substance has returned, so that he will recover.[3]

The soul-substance can assume various shapes when it leaves the body. Sometimes it returns to the patient in the form of a butterfly.[4] Kruijt once showed a worm which he found in a water-butt to some Toradja folk, who expressed great alarm, for it was, according to them, some one's soul-substance. If a Toradja man sees a worm on the path in front of him, he places his head-cloth on the ground near to it. If the worm crawls on to the cloth, he then knows that it is his own soul-substance. He puts the worm into the head-cloth which he replaces upon his head, so that the soul-substance can re-enter his body.

The soul-substance can assume the form of a snake. If a snake crosses the path in front of anyone, it must be killed at once, for it may be the soul-substance of an enemy.[5]

The soul-substance can assume the form of a mouse. A tale is told of two Toradja men who were passing the night in the same hut. One was asleep and the other saw a mouse come out of his nose. He ran after the animal and killed it, and then, turning round, found that his companion was dead.[6]

The Toradja believe that the soul-substances of certain persons can leave their bodies in the shape of animals which devour the

[1] Kruijt, 251-3. [2] Ibid., I, 248. [3] 249. [4] 250. [5] 250. [6] 250-1.

soul-substances of other persons. The forms assumed are deer, crocodiles, pigs, apes, buffaloes, and cats.[1]

The beliefs which the Toradja hold concerning the soul-substance therefore present an apparently confused medley. The soul-substance is a minute replica of its owner, or it is the shadow: it comes and goes by the crown of the head, the ears, nose, mouth, or joints. It assumes animal forms when out of the body; butterflies, worms, mice, snakes, pigs, cats, crocodiles, apes, and buffaloes.

The Toradja are indefinite about the fate of the soul-substance after death: "'it goes back to the lord up above,' says one, 'it becomes a bird,' says another, but generally no answer can be given". But although vague about the soul-substance the Toradja are definite in their distinction between the soul-substance and the ghost, which comes into existence at death and goes to the land of the dead. The soul-substance does not go after death to the land of the dead, and if the ghost of some dead person, through motives of affection, jealousy, or revenge, endeavours to carry off to the land of the dead the soul-substance of a living relative, it is the duty of the priestess to return it to its owner.[2]

The continued absence of the soul-substance from the body causes sickness: if it be too prolonged death ensues. The three chief agencies which produce disease by abstracting the soul-substance are:—

(1) sky-beings;
(2) evil spirits;
(3) the ghosts of the dead.

It is the business of the priestess to procure the return of the soul-substance and so to restore health. To do this she calls in the aid of her friendly *wurake* spirit. When the illness has been caused by an evil spirit or by a ghost, the *wurake* spirit gets back the soul-substance. Such illnesses are therefore curable. But the great majority of illnesses, especially serious ones, and, presumably, all fatal ones, are caused by the sky-beings. In such cases the soul-substance of the priestess goes with her *wurake* spirit to Pue mSongi, who lives at the top of the sky in a house surrounded by crotons, to ask for the soul-substance of the patient, which has, in some way not revealed to us, got up there. If he

[1] Kruijt, 254. [2] 247, 376; II, 84.

returns the soul-substance, the patient recovers: if he refuses, the patient dies and the soul-substance apparently remains on high.

In his description of the interview with Pue mSongi, Kruijt remarks that some say that the soul-substance is the breath.[1] This is a conception of the nature of the soul-substance which has not been mentioned before in the account of the Toradja ideas. This conception of the breath as the vitalising agency is present in a definite form in Nias, for Baliu, a sky-being and a son of the supreme being Lowalangi, is said to have in the sky a store of breath with which he animates each human being at birth.[2] At the death of each person the breath returns to the sky to be re-issued to some one else.

Although the Toradja have confused ideas concerning the nature of the soul-substance, yet they possess a tale in which the breath is the animating principle. For, in the story about the creation of their first ancestors out of stone images, the sky-beings went up to the sky to get the "breath of life". The sky-people of the Toradja tales therefore had a store of breath in the sky, in the same way as the sky-beings of the people of Nias.

The soul-substance is supposed by other peoples to go at death to the sky. This is so in Halmahera. In a case of illness the soul-substance of the priest, accompanied by a sky-spirit, goes to the supreme being and demands the soul-substance of the patient. The shadow of the patient, "the spurious soul-substance," is thrice offered and refused. At the fourth request the soul-substance is returned if the patient is to recover.

The priestesses of the Olo Ngadju and Olo Dusun of Borneo perform a similar ritual.[3]

The soul-substance is thus connected with the sky and with the sky-beings. So, in a place such as Nias, the ghost of a commoner goes to the underground world, while his soul-substance goes to the sky, the land of the dead of the chiefs. The importance which the chiefs attach to the soul-substance is shown by the fact that when an eminent chief in Nias is about to die, his son, who succeeds him, has to inhale his last breath.

[1] Kruijt, Chapters 12, 13. [2] Ibid. (iii), 10. Each human being is also supposed to be given a shadow at birth. [3] Ibid. (iii), 70, 87, 105, 107, 168.

The leechcraft of the initiated priesthoods of Indonesia, which, according to tradition, has been learned from the sky-world, is therefore concerned with the soul-substance of human beings. This soul-substance is associated in a definite manner with the sky-world, and thus with the stone-using immigrants. This close connection is also evident from the fact that the chiefly succession in Nias depends upon a form of direct inspiration.

The available evidence therefore agrees in ascribing the conception of soul-substance to the influence of the stone-using immigrants.

It must be noted that the knowledge that the soul-substance returns at death to the sky is not common property in Indonesia. The Posso-Todjo Toradja are, according to Kruijt, generally unaware of this; for, although some of them know that the soul-substance goes to the sky after death, most of them have no idea at all concerning its destination. It has only been possible to determine the relationship between the soul-substance and the sky by an examination of the sky-derived craft of the priesthood of the Toradja, which is unknown to the laity among this people, as well as to some of the priestesses themselves. The knowledge concerning the soul-substance which is possessed by the average Toradja man is therefore vague and indefinite. It seems to be confined to the fact that man possesses a vitalising essence of an indefinite nature. This vagueness of ideas is the result, apparently, of the introduction by the stone-using immigrants of certain theories about the spiritual nature of man which have only imperfectly been absorbed by the indigenous peoples.

The necessary control over this soul-substance is maintained by the priestesses with the aid of the sky-spirits. The help of these latter beings is so important that if, by any chance, the knowledge of the means of procuring it were to be lost, the priestesses would be powerless, and all illnesses would end fatally. It is thus highly essential from the point of view of the indigenous peoples that the institution of the initiated priesthood should be preserved.

Both the associations of soul-substance and the lack of means of control over it which is displayed by the indigenous peoples, show how strange the idea is in Indonesia.

The priestcraft of Indonesia is also concerned with rice-

growing.[1] The function of the priest is to ensure the health of the rice.

Evidence has been put forward which goes to show that the growing of rice has been introduced by the stone-using immigrants. It is therefore significant that this cereal should be supposed to possess a soul-substance, and that the priestcraft should be concerned with the control of this soul-substance.

[1] Kruijt (iii), 145 *et seq.*, and his article "de Rijstmoeder in den Indischen Archipel" (Verslagen en Meded. der Koninklijke Akademie van Wetenschappen).

CHAPTER XX.

RELATIONS WITH ANIMALS.

AN important matter has been left on one side during this discussion. We have not yet inquired why soul-substance can assume the form of an animal. In the account of the Toradja, and in Kruijt's work on Animism, it is said that the soul-substance can change into deer, pigs, crocodiles, apes, buffaloes, cats, mice, lizards, birds (certain sorts), snakes, grasshoppers, worms, butterflies, and fireflies. So we may conclude that this list represents fairly well the various forms which soul-substance can assume, according to the beliefs of Indonesian peoples.

Other beliefs are centred round these animals. The Toradja say that the soul-substance of a man can change after death into a bird. The Kayan of central Borneo say that it can change into deer, grey apes, snakes, and the rhinoceros bird.[1] The people of south Nias believe that a blacksmith turns into a frog, that a man who dies without sons becomes a moth, and that a man who is murdered becomes a grasshopper.[2]

Not only can human beings thus be incarnated as animals, but they are sometimes descended from animals, and vice versa. The Posso-Todjo Toradja have a tale of a woman who gave birth to two crocodiles. Kruijt remarks: "Sometimes one would be inclined to say that the Toradja consider crocodiles to be the incarnations of their ancestors". Crocodiles are carved upon their temples. The Toradja also consider that birds and dogs were once men.[3] The people of Nias say that cats and monkeys were once human.[4] Among the Loda people of Halmahera a dog which has a white ring round its neck is supposed to be descended from a man.[5] The belief that apes were once men, or that they are the incarnations of ancestors, is widespread in

[1] Kruijt (iii), 167. [2] Ibid., 184. [3] Kruijt and Adriani, I, 264, 266; II, 178. [4] de Zwaan, 213. [5] Kruijt, 122.

Indonesia. Speaking generally of the relationship between men and animals, Kruijt says, "the descent of animals from men and of men from animals (whereby it is clear that no essential difference between the two is felt) is a theme which recurs incessantly in the tales of Indonesian peoples".[1]

Certain animals are prohibited as food. The deer, grey apes, snakes and rhinoceros birds, which the Kayan look upon as the incarnations of ancestors, may not be eaten.[2] The cat and dog are not eaten by the Kayan of the Mahakam river.[3] Some Toradja families may not eat the flesh of certain animals, white buffaloes, eels, and sharks being mentioned. To Lage women may not eat deer's flesh.[4] No reason is given for this belief. Mr. Hodson has given a detailed account of the food prohibitions of the Naga peoples.[5] The village-priests of the Tangkhul are not allowed to eat dogs, which are also prohibited to some individuals or sections of villages. No Tangkhul may eat goats. In some villages, especially those where cloth is woven, unmarried girls may not eat dog or the flesh of any male animal. Pregnant women may not eat bear's flesh or that of any animal that has died a natural death. This prohibition is also found among the Quoireng, Marring, Kabui, Mao, and Maram.

A father cannot eat the cock which he has sacrificed at the birth of a child.

The Quoireng Naga have no general prohibition. A young unmarried girl may not eat male goats. Those whose parents have died from snake bites may not touch the flesh of a snake. Those who have killed a dog or goat as sacrifice cannot eat it.

The Marring do not eat cats and dogs. Members of the clan of the priest may not eat goats.

Among the Chiru no women may eat dog, which is also forbidden to the priests when killed for a sacrifice.

The Maram do not eat pork. Kabui women may not eat goat, and unmarried girls may not eat dog. Old people may, but young people may not, eat the flesh of a cat.

No special animal is forbidden as food to the whole Mao tribe. Pigs cannot be eaten at the first crop festival. Dogs and salt fish are forbidden when rice is being transplanted, and dogs

[1] Kruijt, 121. [2] Loc. cit. [3] Nieuwenhuis (ii), 127. [4] Kruijt and Adriani, I, 413, 414. [5] 182 *et seq.*

are forbidden during rice-harvest and epidemics. "The *gennabura* or *khullakpa* (priests) of the Mao and Maram groups and their wives are under many disabilities in regard to their food. So too are persons who have erected a stone. Warriors, both before and after a raid, are not permitted food cooked by women." Hodson further reports that in a Kom village pregnant women may not eat wild pig, deer, buffalo, and mountain goat. Speaking generally of the Naga he says: "All domestic animals are eaten with the exception of the cat, which is treated with respect and buried with some semblance of funeral rites by the old women in one or two villages". The Tangkhul say that a man who kills a cat becomes dumb.[1]

Certain facts connected with the prohibition of food among the Naga are important. Leaving on one side the cases of pregnant women, the persons who have most food restrictions are the priests. These priests are hereditary, and therefore, according to the conclusion reached in chapter xviii., p. 114, are the representatives of the stone-using immigrants. The other two classes of persons among the Mao and Maram who have food restrictions are those who have erected memorial stones and warriors, both being categories which are especially connected with the culture of the stone-using immigrants.

The restrictions on food in one case are expressly stated to have been imposed by the "gods". The ancestors of the Mao were brother and sister, the survivors of a flood. They were allowed by the "gods" to marry on condition that their descendants never ate pork. Mr. Hodson says: "Finding themselves alone they did not know if they might properly marry and therefore went out into the jungle together. There what befell them showed that there was some hindrance to their union, and they dreamed that night, and in their dream a 'god' came to the man and told him that they might marry, but on the condition that henceforth none of their descendants should eat the flesh of the pig. Thus it was that to this day the pig is forbidden to the men of Maram and to all the villages that follow Maram." Mr. Hodson has also brought into prominence another matter of importance. He says that in the forbidding of pork as an article of food "we have the almost totemistic connection of an

[1] 59.

animal ancestor with the prohibition against the flesh of that animal".[1] He goes on to say that it is "instructive to observe that the prohibition rests on the physical peculiarity of the ancestress of the village. I was solemnly assured that the bones of the lady, an examination of which would have proved the existence of this very remarkable malformation, had been preserved in the village for centuries, and were only destroyed when the village was burnt as a punitive measure soon after the occupation of the Manipur State in 1891."[2] The words of Mr. Hodson are not precise, but they seem to imply that the ancestress of the Maram Naga was a sow.

The Khasi have certain food restrictions. They do not as a people eat dogs or ordinary frogs. Some of the restrictions are said to apply to certain of the exogamous groups of which this people is composed: the Siem-lih clan may not eat a certain kind of fish; the clan *Khar-um-nuid* in Khyrim may not eat pork; and the *'dkhar* clan may not eat the flesh of the sow. In addition we are told that the chiefly family of Sierra may not eat dried fish, and the chiefs of Mylliem may not eat gourds.[3]

In the account given by Kruijt, it was said that the soul-substance of human beings is able to show itself in the shape of cats, pigs, apes, crocodiles, lizards, deer, buffaloes, mice, snakes, grasshoppers, worms, butterflies, and fireflies. Inquiry has shown that cats, dogs, pigs, apes, crocodiles, deer, buffaloes, snakes, frogs, rhinoceros, birds, sharks, goats, and bears are the objects of one or more of a group of beliefs: they are believed to be the incarnations of the dead; or to be descended from men, or vice versa; or they may not be eaten. Each animal is not mentioned as the object of each particular belief or prohibition. Inquiry will perhaps fill up many of the gaps, but it is not possible to say that each particular creature is associated everywhere with all the beliefs. The two lists which have been compiled are remarkably alike, for they agree in several instances. This similarity suggests that these beliefs rest on a common basis, and the fact that human soul-substance can assume animal forms points to the existence of a belief in a spiritual relationship between men and certain animals.

Nieuwenhuis gives information which shows that this relation-

[1] 13. [2] Hodson. [3] Gurdon.

ship is supposed to exist. The Kayan of the Kapuas region, he says, believe that domestic animals such as dogs, pigs, fowls, together with deer, wild pigs, and grey apes, resemble men in that they have two souls, while all other animals and material objects have only one.[1] This statement probably means that these animals are peculiar in that they have a soul-substance like that of man. This supposition is supported by the Toradja belief that their buffaloes, the introduction of which is ascribed to Lasaeo, differ from other animals in that they possess a soul-substance.

The ascription to these animals of a soul-substance provides a logical basis for the beliefs held about them. The existence in the sky of a common store of soul-substance which can be doled out to men and to these animals impartially, makes them spiritually akin; and once the idea has arisen of descent from certain animals, their prohibition as food would follow.

Unfortunately we have no information which will help us to understand how these beliefs came to be associated with certain animals. But several facts go to show that the whole group of notions concerning the relationship between men and animals were introduced by the stone-using immigrants. For they appear to be more closely connected with animals than the indigenous peoples. The chiefs of Kupang in Timor are said to be descended from crocodiles; and the carved crocodiles on the backs of the stone seats of chiefs in Nias (Figure 5) suggest a close relationship between these creatures and the chiefs. Food restrictions among the Naga and Khasi in Assam fall more especially upon chiefs, priests, those who have erected memorials, and warriors, all of them persons who are more closely associated with the influence of the stone-using immigrants than the rest of the people.

The available evidence thus points to the stone-using immigrants as the introducers of certain notions concerning the relations between men and some animals. These notions are based, it seems, upon the assumption that men and these animals differ from other organic beings in possessing a "soul-substance" which is derived from the sky-world. In such circumstances it is to be expected that the attitude of the immigrants towards animals which are connected to them by such close ties of

[1] Kruijt (iii), 11.

kinship will differ profoundly from that of the indigenous peoples, who, so far as can be told, before their coming possessed no ideas concerning the nature of soul-substance and the relations between men and animals. Strong evidence of the existence of such a difference of attitude has already been discovered. For in the punishment tales which were discussed in chapter xvi. it was found that the sky-people were enraged when certain animals were laughed at. The animals mentioned in the tales were cats, dogs, frogs, apes, fowls, and pigs. This list is very like the other two already compiled (p. 158), and it would probably be more like if a greater number of tales had been collected by workers in the field. The anger of the sky-people is thus aroused when animals which, according to the evidence, are related to them by the closest ties of kinship are laughed at by people who have no suspicion of the existence of such a relationship.

It is usual to group these notions of the relations between men and animals under the heading of "Totemism". So the conclusion just arrived at is thus tantamount to ascribing the introduction of "Totemism" to the stone-using immigrants. The data examined in this chapter are not enough to enable us to understand to what extent these totemic ideas have influenced the social organisation and the beliefs of the indigenous peoples. Certain remarks made by Kruijt and others suggest that such an influence has really been profound, and it will be necessary in the future for workers in the field to examine into such important matters far more closely than they have in the past.

CHAPTER XXI.

THE SKY-WORLD.

THE initiated priesthoods of Indonesia consist mainly of priestesses who carry out rites relating to leechcraft, rice-growing, funerals, and house-building. It is the duty of the priestess to try to restore the soul-substance when it has left its human or vegetable embodiment. This can only be done with the aid of sky-spirits. To obtain this help the priestesses chant litanies which are said to have been derived from the sky. These litanies are not wholly understood even by the priestesses themselves, and the ordinary people are quite ignorant of their meaning. So, whatever cults and beliefs the stone-using immigrants may have brought with them, they have left those indigenous peoples who have only initiated priesthoods with ideas about the soul-substance, and priestesses who control it with the help of sky-spirits.

The craft of the initiated priesthood does not reveal much about the stone-using immigrants themselves, or about the sky-world with which they are said to be connected. The folk-tales of Indonesian peoples also apparently are barren of real knowledge of the culture of these strangers. For Hose and McDougall say that, "Among all the peoples of Borneo a number of myths are handed on from generation to generation by word of mouth. These are related again and again by those who make themselves reputations as story-tellers, especially the old men and women; and the people are never tired of hearing them repeated, as they sit in groups about their hearths between supper and bedtime, and especially when camping in the jungle.

"The myths vary considerably in the mouths of different story-tellers, especially of those that live in widely-separated districts; for the myths commonly have a certain amount of local colouring. Few or none of the myths are common to all the

peoples; but those of any one people are generally known in more or less authentic form to their neighbours.

"Although many of the myths deal with such subjects as the creation of the world, of man, of animals and plants, the discovery of fire and agriculture, subjects of which the mythology has been incorporated in the religious teachings of the Classical and Christian worlds, the mythology of these peoples has little relation to their religion. The gods figure but little in the myths, and the myths are related with little or no religious feeling, no sense of awe, and very little sense of obligation to hand them on unchanged. They are related in much the same spirit and on the same occasions as the animal stories, of which also the people are fond, and they may be said to be sustained by the purely æsthetic or literary motive, rather than the religious or scientific motives."[1]

According to Hose and McDougall, the sky-people figure but little in folk-tales, except in connection with accounts of creation and the discovery of agriculture and fire. The examination of the stories of creation and the discovery of agriculture has shown good reason for the conclusion that they rest upon a basis of tradition. The story in which the first men are made out of stone is probably the result of a certain kind of intercourse between the indigenous peoples and the stone-using immigrants. And the claims to be descended from people who emerged from stone or contracted incestuous unions are apparently founded upon a traditional basis. The tales of the introduction of agriculture are also traditional.

The sky-beings only figure in such tales in relationship to the indigenous peoples; as the makers of images, and as beings who gave permission for ancestors to contract incestuous unions, and as the introducers of agriculture. No real information is given about them. Such as it has been possible to gain has been got rather by inference than from the direct assertions of the tales. It is not possible, for instance, to discover from their contents whence the strangers came or why they should have wandered about Indonesia. Once they step on the scene among any people a curtain seems to shut down behind them, and they are only known in terms of their relationships to the indigenous

[1] II, 136-7.

peoples, as the bringers of culture, as supreme beings, or as the founders of chiefly houses. It is possible that, had they not introduced certain crafts and ideas about soul-substance and founded certain classes, they would long since have been forgotten by such peoples as the Posso-Todjo Toradja, as later strangers must have come and gone unremembered.

Further evidence of the ignorance of Indonesian peoples about the doings and the culture of the stone-using immigrants is adduced by Heer Adriani. He says that, among the Toradja, tales are told about the sky-world, and others about the underground world, the land of the dead. The latter are far better known than the former. "The tales of visits to the sky-world depend very little upon common beliefs: they are for the most part literary. The superstition of the ordinary people troubles itself very little with the sky-world. What they know of the higher realms belongs to the region of theology and literature." [1]

Indonesian peoples are not only ignorant about the sky-world, but they are also apparently indifferent towards natural phenomena, such as thunder and lightning. Heer van Ardenne describes the behaviour of the To Lampu, one of the group of the Posso-Todjo Toradja.

He says: "Accustomed to live out of doors, the To Lampu is not afraid of most natural phenomena, such as storms and tempests. During the loudest thunderclaps and the most dazzling flashes of lightning he sits quite unconcerned and does not move. He is not frightened. . . . Sometimes an earthquake happens in these parts, but only very slight shocks are felt, but the To Lampu bothers himself little if at all on that account. When he feels the shock he may look round wondering and then go on with his occupation. What he would do if he felt severe shocks which caused his house to fall, is not doubtful. He would run away, frightened out of his life, and seek shelter.

"Eclipses of the sun and moon and comets have no noticeable influence upon him; he appears to find them quite natural and does not pay attention to them. Here there is not banging on tong-tongs and making of other noises to drive away the evil spirits. People do not appear to think any more about these

[1] Kruijt and Adriani, III.

things, and when I told them a few months before about the forthcoming arrival of Halley's comet, so that the people should not be afraid when they saw it, the only comment after the comet came was, 'The gentleman is very clever, for the star has really come'. Also when I tried to explain to them about some natural phenomena or other, and they did not understand it, and indeed doubted my explanation, some there were who actually said, 'Yes, that may be so, for the gentleman also knew all about the star with the tail'."[1]

The To Lampu may be taken as typical of the indigenous peoples of Indonesia. Their attitude shows that natural phenomena have not roused in them any emotions which have led them to speculate about the cause of these phenomena. The To Lampu say that thunder and lightning are caused by *lamoa*, sky-beings, and are evidently quite satisfied with the explanation. Their attitude is one of indifference and lack of curiosity.

The attitude of the To Lampu towards natural phenomena suggests that the ignorance of the indigenous peoples of Indonesia concerning the sky-world and the cults which the strangers brought with them is due, partly at least, to indifference. The strangeness of the language of the litanies chanted by the priestesses suggests that the stone-using immigrants kept their cults secret from the laity. But the apparent absence of any attempt on the part of indigenous peoples who have only initiated priesthoods to develop a cult of the beings in the sky, and the ignorance which they display concerning the tales about the sky-world, can best be explained by assuming that the sky-world and its inhabitants have no interest for them. The initiated priesthood is only kept on as a practical necessity, and all cults which do not conform to the standard of utility disappear with their introducers.

The discussion of the evidence cited in the chapter on the land of the dead showed that those stone-using people of Indonesia who possess social classes owe their upper class, directly or indirectly, to the influence of the stone-using immigrants. The upper classes claim to be closely associated with a world in the sky, to which they believe that their ghosts go at death. They

[1] Kruijt and Adriani, II, 420.

claim descent from the beings of the sky-world, sometimes from the supreme being. The supreme beings of the Bontoc, the Toradja of Makale, the Kayan, and of the people of south Nias, are said to have lived on the earth. The beings of the sky-world and their earthly descendants are credited with powers over thunder and lightning, rain, wind, floods, and stones. Many stories are told about the denizens of the sky-world, and ceremonies are performed in honour of some of these beings. All this lore and practice is in the hands of the priesthood. When the priesthood is hereditary, the members belong to the upper class, and, by means of their help, the sky-beings and the guardian spirits of the villages can be approached. In those communities in which the priesthood is initiated, this direct intercourse with the sky-world is broken off, and access to the sky-beings is only to be had by means of intermediaries.

On the other hand, the indigenous elements of the stone-using peoples of Indonesia are not connected in any way with the sky-world: they do not claim to go there at death, and they do not suppose that they are descended from its inhabitants. They do not pretend to powers over natural phenomena, to which they are indifferent, and they are ignorant of the lore of the sky-world.

The social division which the stone-using immigrants have produced is therefore fundamental in character. Each part of the community is, in general, occupied with its own affairs, and the only overlapping is that which has been produced by the introduction by the stone-using immigrants of ideas concerning the spiritual nature of human beings, animals, and plants, which has caused the indigenous peoples to maintain an institution which otherwise seems to be a matter of indifference to them.

The inquiry which has been instituted in the last part of this book has shown that the cults of Indonesian peoples can be divided into three groups. Those which the descendants of stone-using immigrants maintain are connected with sky-beings and the guardian spirits of villages. These latter spirits are said expressly to be the ghosts of the ancestors of the village priests. And in certain cases the sky-beings to whom prayers and offerings are made are claimed as ancestors by the chiefly class, to which belong the hereditary priests. It is significant that both these

classes of beings can only be approached through those who claim to be their descendants.

In the second place, the indigenous elements of the stone-using peoples do not appear to perform any ceremonies in honour of these beings, but leave that to the members of the priesthood. Their attention is occupied, it seems, with the ghosts of their relatives, especially of those recently deceased, and the head of each household performs the necessary ceremonies in connection with this ancestor-cult.

Both the immigrant and indigenous elements of Indonesian peoples therefore possess cults connected with spiritual beings who are the recipients of prayers and offerings.

There is also a third group of ceremonies which do not bear any near resemblance to the other two. The craft of the initiated priesthood differs from that of the hereditary priesthood or from the ordinary ancestor-cult, for the priestesses are only able to communicate with the sky-beings through intermediaries. And the purpose of the priestess is not to carry on a cult of the sky-beings to make prayers or offerings to them, but to control, through her helper, the spiritual part of man, plants, and animals.

It is usual to call the objects of the first group of rites "gods". According to the discussion which has preceded, the knowledge of these rites is the exclusive possession of the priesthood, and the ordinary people are entirely ignorant of them. That this fact is a matter of common knowledge among those who have had an intimate acquaintance with the peoples of Indonesia is shown by the following quotations. Heer Kruijt says: "Where the belief in and the worship of gods is an integral part of the life of primitive man, he has no more than a suspicion of his gods, and that suspicion has but little influence upon his daily life". Again, he says that a Toradja man is "quite conscious of the relationship between man and the ghosts of his ancestors. But when anyone asks him about his gods and spirits, then perhaps he may have something to tell which he has learned by chance, but generally he refers the questioner to the priests". In Nias, where the religion is well developed, "the Nias people do not worship their gods, they only expect good from them". Heer Westenberg says of the Karo Batak of Sumatra that "the tales about the gods

are preserved by the priests, for the ordinary people know practically nothing about them; they only know what they have picked up here and there".[1]

The proposition just considered is only a particular case of a general theorem, for the indigenous peoples are not only ignorant of their "gods," they are apparently also ignorant about the sky-world as a whole, and they have no direct communication whatever with it.

The ignorance which the indigenous peoples display concerning the sky-world suggests that, prior to the coming of the stone-using immigrants, no beliefs in such a place existed in Indonesia. The indigenous peoples, as we have seen, do not appear to pay any more attention to thunder and lightning than the ignorant of our own countries, and the inference is that they never imagined the existence of a world above the sky. Certain tales recorded in Indonesia seem to be traditions of the days when the sky-world came into existence for the first time.

Jonker records a tale in Roti.[2] "In former times the sky was very close to the earth, not as at present when it is so high that if one were to place a dozen trees one on top of the other it could not be reached. In that time men went to and fro from the earth to the sky and from the sky to the earth, so that, if there was no fire on the earth, they went up to the sky to get it, and if there was no fire above they went down below to get some.

"At that time lived a man of very great height, called Laihamak, who reached to the sky with his head. He could not walk upright, but only stooping. Laihamak said to the sky, 'Just push up a little higher, you sky, so that I can walk properly'.

"The sky became very angry and receded, so that Laihamak could stand upright, and the birds could not reach the end of the sky.

"When the sky was high up Laihamak could walk properly, and he went round the earth. He began at the west and came to Lailete to the west of Dengka: there he set one foot upon a flat stone and the other upon a large stone in Baa. He then raised his back foot and placed it upon a stone in Keka: he then placed the other foot in Landu: stepped over Pukafu (the strait

[1] Kruijt (iii), 461 *et seq.* [2] (i) 426.

between Roti and Timor) to Sonabai (in Timor) and went further eastwards . . . he never returned to Roti."

The Manobo of Mindanao say that in the early days of creation the sky was low, but an old woman hit it one day with her rice-pestle and up it went. A similar notion is common in northern Luzon.[1] The Ifugao say that the sky region belonging to Manahaut, their most dreaded evil "deity," was once very near to the earth. This region was raised up by one of the sitting Ifugao deities, who suddenly arose and pushed the sky to its present position.[2] The Tagolog say that the sky was once very near to the earth: men threw stones at it and thus made the deity very angry, so that he drew the sky up to its present position.[3]

The Minahassa people say that Mt. Lokon was the old way to the sky-world, but that a man named Warere cut it in two and thus severed the connection.[4]

The Olo Ngadju of Borneo state that the son of Mahatara, their supreme being in the sky, taught them to plant rice. This made Mahatara so angry that he withdrew the sky from the earth.[5]

The sky was formerly near the earth in Nias, so that the priests could get there up a ladder. People used to scrape off the fat from the under side of the sky and eat it. One day a man sent his wife to get some of the fat. She was angry and hit the sky, which thereupon was drawn up.[6]

The direction in which Laihamak moved from Roti is that which the stone-using immigrants are supposed to have taken. Laihamak is said to have stepped on stones. This fact, together with the knowledge that his destination was Sonabait, the chiefs of which, who once ruled Timor, are "children of the sun," suggest that Laihamak is the traditional representative of the movement of stone-using peoples from Roti to Timor. If that be so, the sky-world was separated from the earth at the time of the movement of the stone-using immigrants from Roti to the east.

None of the other tales give any clue, except that of the Olo Ngadju. In this tale the separation of earth and sky takes

[1] Beyer (ii), 89. [2] Ibid., 105. [3] Ibid., 105. [4] Kruijt (iii), 494. [5] Hardeland (i), Langit. [6] Kruijt (iii), 494.

place after the Olo Ngadju had been taught to plant rice by the son of the supreme being, that is, after the arrival of the stone-using immigrants. This evidence is in agreement with that relating to the sky-world which has been forthcoming in previous chapters. The sky-beings figure in the tales of origin of several peoples, and the supreme beings are sometimes supposed to have lived on the earth. The whole of the associations of the sky-world, from the point of view of the indigenous peoples, therefore date from a time subsequent to the arrival of the strangers in Indonesia. No signs exist of any beliefs in a world in the sky or in beings connected with it previous to the arrival of the stone-using immigrants.

CHAPTER XXII.

THE SEARCH FOR WEALTH.

ALTHOUGH the examination of different kinds of data has made it more and more probable that stone-using people have come into the parts of Indonesia with which we are concerned and have influenced the cultures of the indigenous peoples, yet no indication has been forthcoming which will help us to understand the reason why these strangers wandered about the region, settling here permanently, there temporarily, and avoiding other places altogether. The behaviour of the immigrants is often apparently mysterious. Why should they found lines of chiefs in Nias and avoid the neighbouring Mentawi group: why did they disappear from central Borneo, leaving only a few carved stones on the banks of the rivers: why did they settle for a time in the Bada-Besoa-Napu region of central Celebes and not in the Posso-Todjo region, and why did they move southward? Such questions as these could be put with regard to their behaviour in every place that they visited.

It is evidently useless to search for the reason among the folklore of Indonesian peoples, for these peoples seem to know nothing about the immigrants except in so far as they have come into contact with themselves or their ancestors. The most hopeful procedure to adopt is to examine those places where the stone-using immigrants have apparently influenced the culture of the indigenous peoples to the greatest extent, so as to discover, if possible, why such places were more desirable in their eyes than others.

Caution must be exercised in ascribing the practices of terraced irrigation and the building of megalithic monuments to the whole of the stone-using immigrants to Indonesia. But there can be no hesitation in assuming that those places where these cultural elements are found, especially when they exist

together, have been more profoundly influenced by the culture associated with the use of stone than places where such elements do not occur. For, speaking generally, the most typical elements of the culture of the stone-using immigrants occur in association with terraced irrigation and megalithic monuments, as may be seen from an examination of the tables at the end of the book. I propose, therefore, to examine those places where terraced irrigation and megalithic monuments are found.

Sumba is that island of the Timor region which is specially distinguished by its megalithic monuments. With the possible exception of Flores, in no other island of this region do megalithic monuments appear to be so plentiful. Sumba is further remarkable in that it was formerly an "island of gold" and much sought after by adventurous voyagers.[1] We do not know for how long it has been so distinguished, but the great attraction which gold has had for mankind ever since historical times suggests the possibility that the builders of megalithic monuments in Sumba were those who first came in search of its stores of gold.[2]

Gold mines or washings exist in other places where terraced irrigation or megalithic monuments, or both of these cultural elements, are recorded.

The people of Luzon with whom we have been concerned, the Ifugao, Bontoc, and Igorot, who practise terraced irrigation, work extensive gold and copper mines. The Igorot have famous gold mines which have been worked for centuries. Mr. Robertson says: "As early as 1624 the workings of the Igorots appear to be very old, and many of them were already abandoned". Quiranta in 1624 said that Igorot men, women, and children washed for gold in the small mountain streams. They also had extensive workings in the gold-bearing quartz. "Their tools," he says, "were certain stakes of heavy wood fashioned like pick-axes, with the knot of the said stake larger at the end of it, where, having pierced it, they fit into it a small narrow bit of iron one palm long. Then seated in the passages or works, as the

[1] Ten Kate (i), 542, quoting E. T. Hamy, "Le Descobridor Godinho de Eredia" ("Bulletin Société de Geographie," Paris, 1878, p. 511). [2] As far as I can tell, no gold is now found in Sumba. As happens so often in the case of alluvial gold, the supply has doubtless been exhausted.

veins prove, they pick out and remove the ore, which, having been crushed by a stout rock in certain large receptacles fixed firmly in the ground, and with other smaller stones by hand, and having reduced the ore to powder, they carry it to the washing-place."[1]

The Igorot of Lepanto work copper.

Mr. Robertson tells me that, so far as he knows, the distribution of gold and copper mines in Luzon is the same as that of the influence of the culture of the stone-using immigrants.

Unfortunately I have no information concerning Formosa or Minahassa.

Gold exists in central Celebes. No mention is made of gold-washing in the Posso-Todjo region. But in Bada, where the stone-villages in which the stone-using immigrants lived are most common, "gold washing is one of the most profitable occupations of the people".[2] I possess no information concerning the presence of gold in the Sadang district, but it is significant that formerly, when the people of Luwu, which includes the Sadang district, visited Pamona, they strewed gold-dust, rice, and beads upon the seven menhirs which were erected there on the departure of the Toradja tribes.[3] The evidence in central Celebes points to a definite relationship between the presence of gold and that of the culture of the stone-using immigrants. That this is so is made certain by a letter from Heer Kruijt, in which he says that the distribution of metal-workings in central Celebes coincides with that of stonework.

Nias, like Sumba, was much sought after formerly on account of its reputed richness in gold, and many old atlases mark it as the "golden island".[4] Like Sumba, no gold is found there now, but that is no reason why it should not have been worked extensively in former times, for the exhaustion of gold deposits has taken place in all parts of the earth.

In addition to these gold-workings in places where terraced irrigation and megalithic monuments are reported, there are others in those parts of Indonesia with which we are concerned.

In south-west Borneo traces are present of very extensive ancient washings of alluvial gravels for gold and diamonds.

[1] Robertson. [2] Grubauer, 506-7. [3] Kruijt and Adriani, I, 5. [4] Modigliani, 6, 9, 10.

There are also old washings for gold and diamonds on the banks of the Barito river, down which came the ancestors of the priests of the Olo Ngadju.[1]

It was noted in earlier chapters that stones on the banks of rivers in central Borneo are regarded with reverence, and that certain people who are said to have lived there before the arrival of the Bahau group[2] left behind them carved stones on the banks of the rivers. These departed people have apparently influenced the tribes of Borneo in such a manner as to lead us to conclude that they possessed a culture similar to that of the stone-using immigrants to other parts of Indonesia. The presence of old gold-washings on the banks of rivers, especially in south-west Borneo, whence the Kayan say that they have migrated,[3] suggests forcibly that these strangers washed the alluvial gravels of Borneo for gold and diamonds, and that the localisation of their occupation on the banks of rivers has caused the indigenous peoples to associate such places more especially with their influence.

Gold is also washed for in Timor, the chief place being Sonabait, and especially there in the rivers Nono Baun, Noi Noni, Nipo Kain, Noa Penoh, and Lalaeh Asu. The prominence of Sonabait is significant, for the chiefs of that district, who once ruled Timor, are the descendants of immigrant "children of the sun". Gold is said to be "sacred" in Sonabait, which apparently means that it is definitely associated with the chiefs and the sky-world.[4]

The relationship between gold and the sky-world also exists in central Timor, where gold is washed for. Mr. Forbes gives a description of the process. "Before deciding on a day to commence the gold-washing, some of the children . . . are sent to report whether the river is sufficiently low, and in favourable condition. On their return the people are assembled, and public proclamation is made—'Oh, ho, ho, four days hence we go to gather gold'. On that day the Datu-luli (the priest chief), dressed in all the vestments of his office, proceeds (in the district of Saluki) to the top of the curious peak of Fatunarak, where a flat stone exists which is supposed to be the most sacred altar

[1] Hose and McDougall, I, 17; Kruijt (iii), 346. [2] To whom belong the Kayan. [3] Hose and McDougall. [4] Graamberg, 208.

in the kingdom. Behind him follow all the people—men, women, and children. The elder men seat themselves on the ground near the Datu-luli, the women, children, and younger men keeping at a respectful distance. The Datu-luli, then in front of the great stone, invokes the spirits of their dead, Maromak of the Heaven, and Him of the earth. All then return to their homes, where each acting as his own 'house-priest,' kills a fowl or a small pig, and offers on the *luli* stone in his own house, which he then carries to the river to wash the auriferous sand over. It is affirmed that every one finds gold on the first day—more or less, all some. The ritual to be followed by one who is to search for the first time differs somewhat from that observed by those who have searched before."[1] The associations of gold in Timor are therefore such as to connect it with the stone-using immigrants.

The examination of the gold-workings of Indonesia thus gives us reason to conclude with confidence that the stone-using immigrants were seekers after gold, who settled in places where they found it, and usually built megalithic monuments and caused terraced irrigation to be adopted. In Borneo they evidently did not stay permanently. On the other hand, although no terraced irrigation or megalithic monuments have been, so far as I know, reported in Timor, the great prominence there of the "children of the sun" suggests that, when fuller accounts are to hand, it will be found that the strangers have had a more definite effect upon the culture of the indigenous peoples than is at present apparent. The description by ten Kate of structures made of enormous stones in this island is significant and suggestive of a more profound influence than we yet know of.

One exception to the generalisation must be noted. The Khasi have elaborate megalithic monuments and terraced irrigation, but they do not mine or wash for gold. I shall examine this case shortly.

It is evident that people who are searching for gold will seek for other forms of wealth, and will influence the cultures of those places where they find it. I propose to consider from this point of view the problem of the Ursiwa and Urlima of the eastern part of the archipelago.

What could have induced the founders of these brotherhoods

[1] Forbes, 467.

to settle in certain islands and not in others? The sketch-map suggests the answer.

It shows that the pearl-fisheries of that part of Indonesia in question are coincident with the area of influence of the brother-

SKETCH MAP NO. 4.
Distribution of pearl-fisheries with eastern part of the East Indian Archipelago.

hoods. Evidence exists to show that the brotherhoods are connected in some way with Ternate and Tidore in Halmahera.[1] The existence of a chain of pearl-fisheries running southward from Halmahera suggests that the founders of the brotherhoods spread thence in search of pearls and pearl-shell. But as the question

[1] I shall put forward this evidence when I discuss the general problem of Indonesian cultures.

involves a discussion of the origin of the Sultanates of Ternate and Tidore, I shall not enter into it more fully now.

One feature of the distribution of pearl-fisheries in this part of the East Indian Archipelago cannot be allowed to pass unnoticed. The Geelvink Bay district of New Guinea is a noteworthy centre of pearl-fishing. I propose in the near future to put forward evidence to show that the stone-using immigrants have influenced the culture of this region very profoundly, and that the distribution of pearl-shells serves to account for the extent of their influence in this part of the world.

The stone-using immigrants were evidently accustomed to work in metals, for not only did they know the use of gold, but they have apparently taught the Philippine tribes to mine for copper. I propose to examine the peoples of Indonesia other than those already considered, with a view to determining what sort of influence the strangers have had upon the metal-working crafts of the indigenous peoples.

Men of Roti go to an uninhabited island to smelt and work gold, and they sell their wares to the people of the neighbouring islands.[1] No metal-working is carried on in Wetar. Most villages of Keisar have goldsmiths. Iron- and goldsmiths are found in Leti Moa and Lakor, and there are a few in the Babar Islands. Luang-Sermata has a large number of iron- and goldsmiths. In Timorlaut a few people have learned from strangers the crafts of working in gold, iron, and copper. There are iron-, gold-, and silversmiths in the Aru and Kei Islands. No smiths are present in Watubela. In almost every village of Ambon there is an ironsmith. Goldsmiths live in Kaibolo and Kubur of this island and journey about for work. In some of the coast villages of Seran there are metal-workers who have learned their craft from men from Tidore. No metal-working is reported in Buru.[2]

Metal-working, therefore, is not carried on in all the islands of the East Indian Archipelago. None is reported in Wetar, an island where the existence of stone village-walls is not recorded, and where no explanation is given of the cause of thunder and lightning or of thunderstones. The absence of metal-working in

[1] Bastian, II, 66-7. [2] Riedel, 455, 425, 381, 344, 319, 287, 255, 226, 203, 126, 65, 12.

such an island is, in these circumstances, significant. The sun-cult is said to have spread from Luang-Sermata to the neighbouring islands. Metal-working is also carried on to a greater extent in this island than in those near to it. The distribution of metal-working is thus what would be expected if it had been introduced by those who brought the sun-cult with them. The absence of the craft in Timorlaut is especially indicative of the identity of its introducers, for the influence of the stone-using immigrants has apparently been weak there.

Metal-working is absent in Watubela, an island where the influence of the stone-using immigrants seems to have been so slight that they have not founded a class of chiefs differing from the commoners by the use of a special form of stone grave.

In the islands of Ambon, Seran, and Buru the presence and absence of metal-working corresponds to the variations in the cultural influence of the stone-using immigrants. The well-defined use of stone in Ambon is accompanied by the presence of many iron- and goldsmiths. In Seran and Buru, where the culture of the stone-using immigrants has been introduced to but a slight extent, metal-working is unknown, except in some shore-villages.

The correspondence between the distribution of metal-working and the various degrees of influence of the culture associated with the use of stone, enables us to credit the stone-using immigrants with the introduction of this craft.

The Toradja of central Celebes work in iron. Most of their iron-workings were discovered by ancestors, and offerings are made by anyone who digs iron for the first time. Thus, in a place formerly visited by gold-seekers, only the craft of iron-working has survived.[1]

The Kayan excel the Kenyah and Klemantan peoples of Borneo in the craft of iron-working. Messrs. Hose and McDougall are of the opinion that they have introduced this craft among these other peoples. Such an opinion is entirely in accordance with the conclusion arrived at, for the Kayan have had, according to the scheme of this book, closer contact with the stone-using immigrants than the others. The fact that they

[1] Kruijt and Adriani, II, 344 *et seq.*

get their iron from river-beds suggests another reason for the sanctity attached to such places.[1]

The stone-using immigrants appear to have been people well acquainted with the working of gold, copper, and iron, who were so attracted by the first substance that they settled in those places where they found it, and left, among other things, terraced irrigation and megalithic monuments as signs of their presence. To what extent have these strangers succeeded in teaching the indigenous peoples the craft of metal-working? The data at our disposal show that they have only taught them to work gold in some cases. Goldsmiths are found in islands at the east end of the Timor region, and the persistence of this craft in this region is probably to be accounted for by the continuity in the influence of the stone-using immigrants. But the existence of iron-working only in central Celebes, Borneo, and Asasm suggests that the indigenous peoples have only adopted the craft that was really useful to them, a selective attitude similar to that which has caused them only to retain those parts of the priestcraft that are needed for practical purposes. The fact that indigenous peoples who have not been in intimate contact with the gold-seekers have not adopted the use of gold goes to show that this substance has for them neither use nor value.

The movements of such peoples as the Kayan, who have not adopted gold-working from the strangers, nor terraced irrigation, nor the custom of erecting megalithic monuments, but who have simply learned iron-working, a slight use of stone, and the method of growing rice in clearings on the hill-sides, are probably determined by the necessity for acquiring new patches of jungle for their rice-fields. We are told that the Kayan are continually moving onwards in search of new land for cultivation, and pushing the other tribes before them. I propose to follow up this matter in the future, and to show that it helps to throw light upon the question of population and kindred problems.

It is now possible with the information at our disposal to examine the case of the Khasi, who, although they make megalithic monuments and practise terraced irrigation, do not search for gold.

They once had an important iron industry.[2] This, according

[1] I, 193, 194, 197. [2] Gurdon, 57.

to the conclusions just reached, would suggest that the stone-using immigrants had not settled among them. It would seem rather, that those who introduced the use of stone among them had moved out from a centre where the strangers had settled in their search for gold. This is what other considerations would suggest as the origin of some of the culture of the Khasi. Their chiefs are probably the descendants of people who introduced the use of stone, and the claim of one line of these chiefs to have originated from a rock is evidence that their ancestors migrated among the Khasi after acquiring the use of stone. Assam was formerly the scene of much gold-washing,[1] and that metal, if the conclusion arrived at in this chapter be sound, was, as it were, the foundation upon which the civilisation of the valleys was based. It is therefore probable that the culture of the Khasi, as well as of the Naga tribes, all of whom live in the hills, owes its origin to migrants from the valley, who attracted by the large quantities of iron ore which existed in the Khasi hills, settled down there and started to work the metal. The migrants would perhaps not be the original stone-using immigrants, which would account for the absence of the claim on the part of Khasi chiefs to be descended from a sun-lord, and of a sun-cult among this people.

[1] Ball, 218.

CHAPTER XXIII.

CONCLUSION.

IN the course of the development of the argument it has become evident that it would be possible to extend indefinitely the investigation into the effects produced by the stone-using immigrants upon the cultures of Indonesian peoples. For, in addition to such topics as have been discussed, others, such as head-hunting, warfare, image-making, the building of villages and houses, have obtruded themselves, but have been left on one side for future consideration. And there are yet other important topics which must be examined in the future. But, as the discussion has served to establish with more or less definiteness the relationship between the stone-using immigrants and the indigenous peoples, and to determine the reason which led the former to Indonesia, it is convenient to bring the inquiry to an end at this point for the time being, and to sum up briefly the conclusions to which the available evidence has led us.

The facts at our disposal agree in supporting the conclusion that people have migrated into those parts of Indonesia with which we are concerned in search of gold and probably of other forms of wealth. The study of the stone-work first suggested that a migration had taken place, and this circumstance has caused the use of stone to play a part in the general discussion which is probably altogether disproportionate to the significance of this cultural element. The examination of stone graves, stone seats, and memorial stones, as well as of the use of stone for secular purposes, coupled with the traditional evidence derived from various peoples in Indonesia, led us to infer that the use of stone is not indigenous, but has been introduced to various parts of this region.

The strangers who brought in the use of stone also introduced terraced irrigation, metal-working, and rice-growing. They

founded lines of chiefs in some places, upper classes in others, and in others they have caused warriors to be distinguished from the rest of the community, the reason suggested being that they have introduced warfare to Indonesia.

The immigrants appear to have brought with them the belief in a world in the sky, a belief which, so far as can be told, was not held by the indigenous peoples before their arrival. The members of those classes which were shown to have been founded by the strangers imagine that they go to the sky-world after death. In certain cases the hereditary chiefs claim descent from inhabitants of the sky-world, and the supreme being is sometimes a stone-using immigrant, or some one who is said once to have lived on the earth. The indigenous peoples appear to have no connection with this world in the sky.

The stone-using immigrants have founded priesthoods which are of two kinds, hereditary and initiated. The members of the hereditary priesthood are the descendants of stone-using immigrants or of beings of the sky-world, and they carry on cults associated with the beings of the sky and with their ancestral ghosts, which latter beings are the guardian spirits of villages.

The initiated priesthoods, the members of which are usually women, are concerned with leechcraft, rice-growing, funerals, and house-building. Their craft was derived from the sky-world, but the priestesses can only act each with the help of her friendly sky-spirit. These priestesses chant litanies which are partly in unknown languages. The meaning of these litanies is often foreign to the priestesses themselves, and almost invariably so to the ordinary people. The basis of the craft of the initiated priesthood is the belief introduced by the stone-using immigrants, that each human being has a soul-substance. This soul-substance, it appears, is closely connected with the sky-world and with the chiefly class in Nias. Rice plants also possess it, and the priestess has to ensure by the performance of ceremonies the safety of the rice crops.

The stone-using immigrants brought with them a sun-cult, a whole group of beliefs and tales concerning the sky-world and ideas about fertility and the use of phallic symbols. Some of their descendants claim to be "children of the sun". They probably practised incestuous unions, which custom has caused

certain peoples to claim that they are descended from ancestors who were blood relatives. They have also apparently brought with them ideas concerning the relationship between man and certain animals, which are based upon the conception of the common possession of soul-substance; and the tales of punishments for laughing at animals probably owe their origin to this belief.

The influence that these strangers have had upon the indigenous peoples has apparently not been profound. They have, in general, only led to the adoption of terraced irrigation, gold-working, the carving of stone, and the making of megalithic monuments in places where they have founded chiefly or upper classes. In other places rice is grown by the dry method, if at all, and only iron-working is carried on. Among peoples who possess hereditary priesthoods, the ghosts of stone-using immigrants are the guardian spirits of villages, but this is apparently not so when the priesthood is only initiated. The cults introduced by the strangers have, in such cases, disappeared, and the priesthood is only concerned with matters of practical importance.

The indigenous peoples are ignorant of the sky-world and of the lore concerning it, for the latter is only known to the members of the priesthood, who preserve and hand on the tales, beliefs, and ceremonies which form their professional stock-in-trade.

The beings of the sky-world only appear to enter the folk-tales of Indonesian peoples in relationship with themselves or their ancestors, as creators, culture-bringers, and as the founders of chiefly houses.

The task which the study of the culture of the stone-using immigrants imposes upon students is threefold. In the first place it is necessary to extend the inquiry to topics which were left on one side during the present investigation, and to other matters which have not been mentioned, so as to determine more fully the extent of the influence that the strangers have had upon the cultures of the indigenous peoples. In the second place it is necessary to extend the area of the inquiry to the parts of Indonesia which have been ignored, and thus to determine the relationship between the cultures of the peoples living there and those with whom we have been concerned.

This will entail the examination of the problem of external influence upon the region.

Finally, it must be remembered that the existence of megalithic monuments, terraced irrigation, mining sites, the sun-cult, "children of the sun," and other elements of the culture introduced by the stone-using immigrants has been recorded in all inhabited regions of the earth. The investigation undertaken in this book is therefore only a part of the wider inquiry into the distributions and associations of these and other cultural elements, and into their mode of dispersal. It will be necessary in the future, in order to carry through this wider inquiry to a satisfactory conclusion, to examine all the regions of the earth in detail, as well as to synthesize the results obtained. All these processes are now at work, and it is becoming possible to understand the complicated phenomena of limited regions as well as to grasp the relationship of these local manifestations to the wider movements and developments of the culture associated with the use of stone. The study of the cultures of Indonesian peoples has already provided clues which promise to lead to the solution of problems which involve the greater part of the inhabited globe,[1] and there is good reason to believe that, by travelling on the road opened up anew by the genius of Dr. Rivers and Prof. Elliot Smith, we shall finally succeed in understanding, with a clearness hitherto unthought of, the development of civilisation.

[1] Perry (iii), (iv), (v).

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ABBREVIATIONS.

BTLV. Bijdragen tot de Taal- Land- en Volkenkunde van Nederlandsch-Indië.
MNZG. Mededeelingen van wege het Nederlandsch Zendeling-genootschap.
TTLV. Tijdschrift voor Indische Taal-Land en Volkenkunde.

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Timor Region.	Sumbawa		+	+							+			
	Flores		+	+										
	Solor		+	+	+									
	Sumba	+	+	+	+	+		+				+	+	+
	Savu		+	+	+									
	Roti		+	+	+	+	+	+			+			
	Timor		+	+		+		+					+	+
	Wetar		+	+				+						
	Keisar		+	+	+	+		+						
	Leti Moa Lakor		+	+	+	+		+						
	Luang-Sermata			+		+		+						
	Babar		+	+		+		+		+		+		
	Timorlaut			+		+		+						
	Aru					+		+						
	Kei	+	+	+		+		+			+			
	Watubela		+	+		+								
	Ambon		+	+	+	+								
	Seran	+	+	+				+			+			
	South Buru		+	+										
	North Buru													
	Halmahera	+						+			+			
Philippines.	Bontoc		+		+	+	+				+		+	
	Igorot		+								+		+	
	Ifugao		+								+		+	
	Negrito													
	Formosa		+				+							
	Minahassa	+	+	+	+			+		+	+		+	
Central Celebes.	Posso-Todjo Toradja	+						+	+			+		
	To Pajapi		+			+								
	Bada Napu Besoa	+		+	+			+					+	
	Sadang Toradja	+												
Borneo.	Kayan		+					+						
	Kenyah							+						
	Klemantan													
	Punan													
	Nias	+	+	+	+			+			+	+	+	+
	Mentawi													
	Engano													
Assam and Burma.	Khasi	+	+	+	+		+	+		+			+	
	Garo	+									+			
	Tangkhul Naga	+	+	+	+		+	+			+		+	
	Kabui Naga	+	+							+	+		+	
	Mao Naga	+		+				+			+	+	+	
	Lushei	+												
	Old Kuki	+						+			+	+		
	Chin	+								+				
	Mikir	+	+											
	Karen		+					+					+	

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